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SAFETY AND RE-REGULATION OF THE AIRLINE INDUSTRY

HEARINGS

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

SAFETY AND RE-REGULATION OF THE AIRLINE INDUSTRY AND
FINANCIAL CONDITION AND QUALITY OF SERVICE

OCTOBER 15, NOVEMBER 4, AND 18, 1987

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SAFETY AND RE-REGULATION OF THE AIRLINE INDUSTRY—AVIATION SAFETY

THURSDAY, OCTOBER 15, 1987

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The committee met, pursuant to notice, at 10:05 a.m., in room SR-253, Russell Senate Office Building, Hon. Ernest F. Hollings (chairman of the Committee) presiding.

Staff members assigned to these hearings: Steve Palmer, professional staff member; and Patty Hahn, minority staff counsel.

OPENING STATEMENT BY THE CHAIRMAN

The CHAIRMAN. The committee will come to order.

We commence today with our committee overview of airline safety and the effects and results of deregulation after eight years and the potential need for some amount of re-regulation.

We have, done much in the area of aviation in the last year. The Aviation Safety Commission was established as a result of an amendment offered by the Minority Leader to the concurrent and continuing resolution last year. After months of delay it has finally gotten organized.

It is supposed to report back by next April, but in a sense that will be too late for this committee's responsibility regarding our immediate need for us to educate ourselves as to just exactly what can be done and what should be done in the near future.

We also have an Office of Technology Assessment Safety Study which is ongoing and which is to report back in February of next year.

We have S. 1485, the Air Passenger Protection Act. It has been reported and is ready to be acted upon.

We have the Airport and Airways Trust Fund Reauthorization, S. 1184, which provides for some $15.6 billion over the next three years.

We had the National Transportation Safety Board reporting to us earlier this year and recommending, of course, that because of increases in air traffic, we need to impose some form of flight restrictions.

At that particular time, the FAA said it was not a problem, while the National Transportation Safety Board said it was a problem. Fortuitously, the FAA came around, and they put in some traffic restrictions. The question now before the committee is have they been sufficient.

We have also had series of hearings on whether the Federal Aviation Administration should be established as an independent agency. Our distinguished subcommittee chairman, Senator Ford, has had two hearings already and has two more hearings scheduled on that particular score.

I have had pilots come into my office from time to time telling of the sacrifice of safety for profits. One pilot not too long ago came in and said that going into Danville late one evening, you have what you call a yaw dampener, as I understand it. Mr. McArtor who is here today is a pilot, and I am not, so he will tell us about it.

In any event, that is to keep it from fishtailing. It is operated automatically with a hydraulic system. It must have, of course, fluid in it. It did not, and as a result it started fishtailing. The only way to get out of it is to go into a dive, which the pilot did. He saved his crew and his plane, but the ambulances had to meet him at Danville to take them off because several passengers were injured.

He told his friend, another pilot, about it. The following week he was taking off in the same plane and it did not have the proper pressure. So his friend asked for another plane. Late that evening when he had finished his day's work, that particular pilot was called by the chief pilot, who said, look, next time you call for other equipment, just remember, we cannot stand those delays; look for another job.

We will have testimony to that effect. I think the main concern here today must be safety.

We have had an increase in near misses and mid-air collisions, some 857 this year. We wonder whether or not we have sufficient controllers. We had to force feed that upon the former Secretary of Transportation. She was always going to get them until we put in a bill. Then they finally moved on that particular score.

Similarly, with respect to general aviation flying into congested air corridors where they must be required to have a transponder, this mode C transponder where the tower can identify and keep track and avoid collisions and near misses, that was resisted until we put in a bill. Now they have said, all right, we will have transponders at 23 airports, but not the 180-plus airports where we have radar control.

Wherever there is radar control of traffic, we should not have unidentifiable craft moving into those particular corridors, in my opinion.

We will have the hearing today and hear from the distinguished aviation leadership in this country, focusing on these safety concerns.

Then on November 4, we will look at the economic conditions, as well as airline mergers. As was intended, the mergers have not since deregulation, really promoted competition. Rather they have destroyed it. I have watched all of these mergers. We resisted it down to one in our own backyard.

I can tell you now, if I were there and in control, I would approve the one between Piedmont and U.S. Air because now that the others have come of size and economic control, it requires the lesser or smaller ones to merge to survive. Then, as a member of the traveling public, have I lost all my service as a result thereof?

In addition to that, we must look at the question of access with respect to these heavily-used airports. Who controls, who regulates the capacity is the question. The former Secretary of Transportation said let's get together the owners of the various airlines. I do not know that you can identify the owners. That crowd changes overnight.

They were, however, going to get together with the owners and let them work it out. I do not think we can submit to that kind of arrangement in the interest of public safety and in the interest of access to these congested areas.

Before turning to my colleagues on the Committee let me first say that our distinguished Chairman of the Aviation Subcommittee has been doing an outstanding job. Whatever we come up with as a result of these hearings he will be handling.

What I really wanted to do is get a general feel of where we are. Senator Riegle and other Senators on both sides of the aisle have been asking about deregulation, and I have just been looking at this matter and as Chairman of this committee and as a member of OTA. The different ideas and pressures have been coming around as to where we really are going, and we must decide whether we continue in a higgly-piggly fashion or in a comprehensive way.

That is what is intend to do this morning. We need to start a comprehensive overview with respect to safety and service.

So, without objection, I will include my opening statement in the record, but I did want to say at least that and yield to my ranking member.

[The statement follows:]

Opening Statement by the Chairman

Today, the Committee on Commerce, Science, and Transportation meets for the first of a series of hearings to examine the state of the air transportation system.

It has been nearly a decade since the federal government deregulated the nation's commercial airlines. We have allowed more than enough time for the dust to settle and the wrinkles to be ironed out. If deregulation has worked—if it has been good for the nation—then it would have worked by now.

Clearly, it has not. Record numbers of air travelers have been inconvenienced in the past year, as America's air transportation system has been plagued with scheduling problems and delayed flights. Airlines are gobbling each other up in a wave of mergers that continually upsets the stability and reliability of the system. We have no idea where airline travel is headed or how it will serve the public in the coming years. It's a mess.

This hearing has been scheduled to focus on the most serious of the problems that have been caused by airline deregulation—a deterioration of safety. Plain and simple, the fact is economic pressures brought about by deregulation have eroded the margin of safety in the skies.

As long as I am chairman of this Committee, I will accept no knee-jerk reactions against the possibility of reimposing government regulations in the interest of safety. Our most solemn duty here in the Congress is to provide for the protection of our citizens from harm. *Salus populi supreme lex*—the people's safety is the highest law.

Our aim is to preserve the benefits of deregulation while doing what we can—and what we must—to increase the margin of safety and remove any doubt that airline travel in the United States is as safe as it can possibly be. After all, if lower fares were our only aim, we could, I suppose, just throw safety regulations completely out the window. "Fire the mechanics! Fire the safety inspectors! Run the whole system on the cheap! And pass the savings on to the consumer!" I don't think anyone wants that. Would you board a $29.95 flight to the West Coast under these circumstances? I don't think so.

There's a simple truth about free enterprise—it doesn't always provide the highest standard of protection for the consumer. Adam Smith notwithstanding, we're talking about a matter of life and death. Adam Smith never had to fly the airlines.

There are some serious problems out there—problems which we'll be examining very closely here today. The near midair collisions are on the increase. As evidence of this we need only look at the 857 reported near-misses in the first 9 months of this year, as well as the 984 controller errors and 2,551 pilot deviations. While it's true that major air disasters have not increased, these statistics tell me that we've merely been lucky. We're treading on thin ice.

Deregulation has brought a tremendous expansion in the number of airline flights. There are new airlines, new routes, and new economic pressures. Airlines have been forced to cut costs. They can no longer afford to operate far above and beyond the minimum safety standards required by the FAA. Doing so is now considered a luxury.

Over the years, we've seen a gradual narrowing of the margin between federally-regulated safety standards and those of the airlines themselves. Soon, there will be no room for error. A minor lapse in judgement, a small equipment failure, a seemingly insignificant mistake during some bad weather—any of these could place human lives below the threshold of what the government considers safe. That's discomforting, to say the very least.

There are other pressures on safety that have been brought about by deregulation. The new "hub-and-spoke" system of operation has brought with it new problems for our air traffic control system. We now see sharp peaks in the traffic flow when it converges on the hub to meet passenger transfer schedules.

I call it "hub disease."

In addition, the Federal Aviation Administration has not kept pace with the rapid advance of airline scheduling following deregulation. We don't have enough controllers. We don't have enough modern equipment. We don't have the airport and airway capacity to prevent the margin of safety from eroding significantly.

This erosion is a clear signal to this Senator that the airlines are not as safe as they once were. And if that's the case, then they are clearly not as safe as they could possibly be. When we're talking about human lives—in the air and on the ground—we simply must hold ourselves to the highest standard.

I am not saying all this in an effort to frighten anyone. This hearing has not been called for that purpose. Rather, as a Committee of Congress that is charged with ovesight responsibilities regarding our air transportation system, it is our duty to determine exactly what problems exist and what remedies are available. And we are going to act in the interest of safety, I can guarantee you that.

Today, we have a number of distinguished witnesses who will appear, including the Administrator of the FAA and Chairman of the NTSB. I appreciate their coming today, and look forward to hearing their testimony, as well as the insight offered by the other witnesses who will come before this Committee today.

Finally, I'd like to thank the Chairman of our Aviation Subcommittee, Senator Ford, for his leadership on airline safety and other aviation issues. That subcommittee has been extremely busy this year focusing on various funding and oversight questions—as well as the problems brought on by deregulation. I hope that working together we will be able to make great progress toward straightening out this mess.

OPENING STATEMENT BY SENATOR DANFORTH

Senator **Danforth**. Mr. Chairman, thank you very much. As always, you have spotted a very important issue and directed the committee's attention to that issue. I commend you for that.

Clearly, safety is the number one requirement, the number one priority for air transportation and for the attention of this committee. The deregulation of air transportation did create a great increase in the number of passengers who could travel. This has been, I think, generally a very good thing for the American traveling public.

There have been obvious problems with it. I think that there are always obvious problems when there is a major change in how business is conducted, but deregulation did bring air transportation within the reach of many more Americans than was previously the case, and I, for one, do not believe that we are going to go back to a regulated atmosphere or that we should go back to a regulated air transportation industry.

Clearly, however, safety is the number one concern and must be the number one concern of all of us. If deregulation is going to work in any industry, we have to make sure that that deregulation is consistent and compatible with safety.

So how to work out the requirements of air transportation safety and particularly do so in a way that is consistent with our previous action in deregulating this industry, I think, is going to require the best attention of all of us, and, again, I commend you for holding this hearing.

The **Chairman**. Thank you.

The staff has indicated the order of appearance: Senators Exon, Riegle, Kerry, Pressler and Kasten. I want to first yield to our Subcommittee Chairman, Senator Ford.

Senator **Ford**. I thank you, Mr. Chairman. I appreciate the opportunity to be here this morning, and I appreciate what you are doing. I will yield my time to others who were here first. I appreciate your allowing me to say something first, but I know these fellows, and I do not want my plate broken.

The **Chairman**. Very good.

Senator Riegle.

OPENING STATEMENT BY SENATOR RIEGLE

Senator **Riegle**. I have never seen such politeness here in the Senate before, but I thank both my colleagues.

Senator **Ford**. There is no money involved.

Senator **Riegle**. I see.

Mr. Chairman, first let me commend you for calling these hearings, because we are about to address a number of critical issues facing the country. Today in our society, most families at some time or another are traveling, and there is great concern about what is happening in the air travel system.

All of us in the Senate fly a great deal, so we have had a chance to see it for ourselves. I can just tell you in terms of the experience that I have had flying to and from Michigan, principally, that the problems have built up at a very rapid rate since airline deregulation was enacted in 1978.

In the Detroit air terminal, for example, we now have Northwest, which recently merged with Republic. We have had the most extreme problems that I ever would have imagined could resulted from a merger.

Flights chronically late; flights abruptly cancelled; people waiting to take transcontinental flights told at flight time that suddenly the flight is cancelled and they are on their own; and bags disappearing and bags going to other destinations.

As infuriating and awkward are those problems are for people, especially in a modern nation where the business traffic each day has to get to where it is going if we are going to be able to function as a nation, there are also the air safety problems.

We have had a major crash in Detroit, which we are still examining and trying to understand exactly why it happened. But I can tell you this, when the baggage system is not working, when the flight arrival and departure system is not working, and when we are hearing and reading about the hundreds and hundreds of near misses each year in the air in the United States, it is not surprising that major accidents are going to happen.

I think we are likely to see other major accidents in this country unless steps are taken to substantially improve this system. I would just say, frankly, in watching the Department of Transportation over the last few years, there has been a lot of talk and very little action in terms of actually getting to the problem of improving the air travel system. And that relates to air service and safety.

We all know that we do not have enough air traffic controllers, and there is no reason for that. We ought to have that system fully staffed, and it is not today. There has been a lot of double talk and foot dragging as to why we cannot have adequately trained controllers on the job, but the cold fact of the matter is we do not have them.

We have had planes go down from mid-air collisions. We had the President's helicopter involved in a near miss just recently in California. So this is a real problem, and I think it is time that we act in a forceful way on it.

I think we have to move in the direction of some additional measure of regulation, because I am seeing the effects of deregulation not serving the public the way the public needs to be served.

With respect to service in outlying areas, I am finding across the State of Michigan and in talking to my colleagues from around the country that more and more communities are being disconnected from the air travel system. You are also seeing anomalies in pricing where in some instances short hauls between locations actually cost far more than even a transcontinental plane trip. There is something clearly wrong in the structure of the pricing of tickets within the system.

Again, a modern nation with a trade deficit of $170 billion, according to new trade statistics yesterday, cannot function properly if we cannot connect our whole country to a modern, safety air travel system. Outlying communities have the right to service just as much as the heavily traveled major populated urban centers, and I just think we have to understand that requirement if we are going to be able to have any kind of balance or any way to try to move our country in an efficient way day in and day out.

So I would hope, Mr. Chairman, that these hearings would illuminate these problems. We are going to hear some things today from some of the people who are in the air transportation system on the safety problems. The safety problems are real, and if this administration does not want to face up to it, which they have shown no desire to so far, then I think the Congress has an obligation to do so. If that means new law and tougher law and more regulation, then so be it.

I think when people get on these planes, they have a right to expect that they are going to get good service and that they are going to arrive safely at their destination.

I will conclude, Mr. Chairman, by saying that some of us had the occasion after the crash in Michigan recently to visit the scene of that accident. I do not know how many people have had the occasion to do that. I do not recommend it, because it is as heartbreaking an experience as one can imagine.

We just cannot subject people, families, to risk where they have absolutely no control. When people get into an airplane and take off in a regulated environment in which the air traffic control system is supposed to provide a measure of safety, they ought to be able to buckle in with a sense of confidence that they are going to get to their destination and get there roughly on time.

I think today people do not have that confidence to the degree they should, and I think it is time that we act to restore that sense of confidence in our system.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Exon.

OPENING STATEMENT BY SENATOR EXON

Senator EXON. Mr. Chairman, thank you very much. I am delighted that you called this meeting. There are those of us on the Aviation Subcommittee who have been addressing this for a long, long time. We could not be doing anything better than calling the witnesses that we are going to hear from today. Some of the testimony, I suggest, is going to be rather shocking.

From my perspective, we have the best airline safety system in the world, but it is not good enough, and I think that is the overall message.

I am not at this juncture for re-regulation of the industry. I think deregulation has done too much good, but it has brought on some things that we must address in the Congress because so far the administration has not seemed to want to come to grips with it.

I want to thank Mr. McArtor, the new Administrator of the FAA. From our many discussions, I think that he not only knows what the problems are, but he has begun to move to correct some of those.

We do not need re-regulation, in my opinion, but we do need to use the authority that the Federal Government has through its agencies since, regardless of who owns the airplanes, they do not own the airports. That is something which we overlook from time to time. I am talking about slots. I am talking about which airplane is going to be allowed to land at what time, especially in our hub airports where the major problems occur with regard to safety.

Now, having said that, I want to also say that I am not yet satisfied with the interpretation and the enforcement of the laws that we have with regard to maintenance on the major carriers. I am not saying that they are all bad, but I am assuring you that they are not all good.

I simply say, Mr. Chairman, that with the proper use of the rules and regulations that we have, working together we can solve the problems without re-regulating the airlines.

One of the things that I think we are going to have to expect from the people in the Department of Transportation and from the FAA—and I suspect it may be moved out from under the Department of Transportation based on legislation which is now being considered by the Congress, but until that time, I think we are going to have to step up even more than we have and tell the major airlines how many planes they can have coming into a hub airport across this Nation, not just to meet competition because everybody wants to leave from National Airport at 5:00 p.m. on Friday.

Some of them are going to have to leave, including this Senator who travels regularly, maybe at 1:00 p.m. or maybe at 9:00 p.m. I do not have the right if it interferes with safety to leave here at 5:00 p.m. on Friday to go back to Nebraska.

Whether that fits my convenient schedule or not, we have to put safety over and above the competitive practices that I know the airlines run into with regard to scheduling. I think if we could properly schedule the airplanes coming in and out of our major hubs, we would go a long way to solve the safety problems, but we have much to do in addition thereto.

I thank you for holding this hearing.

The CHAIRMAN. Thank you.

Senator Kerry.

OPENING STATEMENT BY SENATOR KERRY

Senator KERRY. Mr. Chairman, thank you very much.

I share the feelings expressed by my colleagues thus far. I have had the privilege of serving with Senator Ford as a member now of the Aviation Subcommittee, and I am delighted that we are holding these hearings. I think they are very, very important indeed.

It is obviously not our purpose on this panel to testify ourselves now, but I do want to make a couple of comments. I have to chair another subcommittee meeting and cannot be here for all of the questions which I would like to ask, but I would like to express my shared feeling along with my colleagues that the importance of these hearings is second only to the importance of responding to what comes out of these hearings as rapidly as humanly possible.

I think all of us know that we are flying on a precipice, and we have been pushing the limits these past months. I think the new Administrator has moved to try to deal with some of that in recent months, but for too long there really has been delay and procrastination.

All of us know that in many ways you take your life in your hands. As a public official, if the flight delays or the maintenance schedules or the cancellations or even safety problems do not get you, an angry constituent is going to get you. I have never seen the level of anger that is spontaneously directed at us as recognizable figures at an airport. People come up to you and complain. People literally express fear at getting on an aircraft.

The flying public, which is increasing and about which we are happy, is literally scared to get on a plane and is abused. I think there is no reason for people, who are paying the kind of money they pay to fly and expecting the service that they expect to be treated the way that they are being treated by the airlines in this country.

The reasons are obvious, Mr. Chairman. You and every member of this panel knows that. Nine short years ago we had 292 million people flying. In the span of those nine years, there are now 415 million people flying. Not only have we increased the passengers, but we have increased the number of aircraft.

Now, I think none of us want to go back on deregulation. I do not want to. I think it has brought us very important benefits. How can you continue to have a system, however, which has that kind of increased passenger traffic, increased flights that have gone from 4.7 million to 6.2 million, and yet cut air traffic controllers in real terms?

I think we had a supply of air traffic controllers in 1981 that was 16,375, of whom 13,000-plus were designated as full performance level controllers. Now there are 15,000, only 9,000 of whom are considered fully-trained. There may be a few more, but not many.

Now, in the Boston air traffic control center, which controls most of the traffic moving through the New England region, we have 140 controllers who work a six-day week in order to compensate for the fact that there are 170 other authorized controller jobs that are vacant—vacant, Mr. Chairman.

Just a few months ago, we had a Continental airplane and a Pan American airplane assigned to the same altitude, and they came within 500 feet of each other over Bridgeport, Connecticut.

In addition to that, other safety problems are rampant. I have had a number of flights cancelled because aircraft altimeters do not work, or something else does not work; the seats will not go back; things drop out of the panels inadvertently. The deteriorating quality of the aircraft is clear.

I talk to the pilots and to the stewardesses, and they tell me about the corners that they feel are being cut in terms of maintenance, not to mention the worries that they have as professionals in this system.

I think it was last February that Eastern was fined $9.5 million for 78,000 maintenance violations. The fact is that there are today, with an increasing number of flights and passengers and pressures, less FAA inspectors available to inspect. So we are less able to divine whether there are even more maintenance violations which could, in fact, put people's safety in jeopardy.

So while I cannot be here for the whole hearing, Mr. Chairman, I know you and others will be here to explore these matters. I certainly look forward to answers, and I hope that we are going to be able to respond.

We all know that the response to this does not immediately cost the taxpayer money. There are billions of dollars literally sitting there in the Airport and Airway Trust Fund that could be expended to address these issues. The question is when is somebody going to get off their rear end and begin to make it happen.

Thank you.

The CHAIRMAN. Amen. I can emphasize as a member of the Budget Committee and this committee that it has not been a money shortage. We have been trying to force feed, if you please, the FAA and this administration for more controllers, for more safety, for more monies out of the Airport and Airways Trust Fund. We do not need that to balance any budget.

So let us emphasize what the Senator from Massachusetts is saying. It has not been a shortage of money. It is a shortage of policy.

Senator Pressler.

OPENING STATEMENT BY SENATOR PRESSLER

Senator **Pressler**. Thank you, Mr. Chairman.

I think that we are at a critical time regarding air safety and air service. You do have a feeling in flying on the airlines that something terrible is about to happen though it has not happened yet on a big scale.

Also, the quality of service, the cleanliness of planes, the whole system has just deteriorated to a point where we need a national effort to upgrade it.

There is also a problem which has not yet been mentioned here, and that is in the cost of tickets. If you are a captive traveler, if you are a businessman who has to go someplace on short notice, you pay an extremely high price for a ticket. If you are a family member and you have to go to a funeral two days from now unexpectedly in another city, you pay a very high price in many instances if you are in a market where there is not extensive competition.

I come from the State of South Dakota, and it can cost more to fly from one or two locations in South Dakota than it can cost to fly all the way across the United States on a SuperSaver plan. That is nice for the people who are able to plan 30 days in advance, but there are many people, going to funerals or businessmen who have unexpected business come up, who must pay an extremely high fare.

Also, as my colleague from Nebraska has mentioned, there is the slot problem. The fact of the matter is that a lot of midwestern airports cannot get slots to land planes for direct flights from many of the eastern or western airports. The first slots are reserved for those who are coming from the big metropolitan airports where the traffic is perhaps more profitable; yet, there is a service to be provided.

I voted against the Airline Deregulation Act because I believe strongly in the concept which was put forth by Congress in 1932 that if you take some rich routes, you are also obligated to serve some poorer routes. That is how our national transportation system was built.

We have also had a number of near misses, even including some in my home state of South Dakota, in the past year. As one flies and as one deals with this whole industry and talks with people, everybody says we need a major national effort to straighten out the airlines, not only the pricing of tickets but the service. I'm referring to the delayed flights, the lost baggage, the way slots are allocated at the major airports, the way service has deteriorated so much, particularly in areas where there are captive travelers; that is, where there is just one carrier available with no competition. That is where the people are really paying subsidies to all these SuperSavers, et cetera.

Mr. Chairman, I have a prepared statement to submit for the record.

I feel very strongly that we must not only hold this hearing but we must take action. There is also the essential air service program for smaller cities. That is very important to the economy, to developing jobs in smaller towns and smaller cities. If this service is lost, economic development, job development and educational development will be lost in many smaller towns and cities not only in the midwest but upstate New York, parts of California, et cetera.

So it is a national crisis. It is an issue that has to be dealt with, and we must get on with it today.

Thank you, Mr. Chairman.

[The statement follows:]

Opening Statement by Senator Pressler

Mr. Chairman, I first want to thank you for holding this first in a series of hearings on Safety and Reregulation of the Airline Industry. This is a very serious issue we will be addressing and I want to stress from the onset my deep concern over the present condition of our nation's airline industry. I cernainly hope that through this series of hearings we will gain a better understanding of the problems that exist, and that we can develop solutions which will ensure greater airline safety practices. I might add that I raised this issue with Secretary-designate Burnley yesterday.

I opposed the 1978 airline deregulation legislation when I was in the House of Representatives because I anticipated many of the problems now taking place. Far too often we are hearing about the many problems that consumers are experiencing with air transportation. Misplaced baggage and flight delays are problems that I would wager to say all of us have experienced, and at an increasing rate. These are most unpleasant inconveniences and I think that improvements can and must be made.

While the annoyances of lost luggage and layovers are very aggravating, I believe the issue of air safety must be made our top priority. If the answer to improving safety procedures means reregulation, then I am all for it. We cannot sit back any longer and allow air safety to continue in its present precarious state.

One of my greatest concerns relating to air safety is the increase in the number of near mid-air collisions. In my home state of South Dakota, the number of near misses is on the rise, too. Mr. Chairman, I raise this point because I feel it is important that air safety in rural states be addressed. Too often, I fear, many policy makers forget this fact. While I recognize the extreme safety hazards in heavily congested areas, I hope we don't overlook the South Dakotas of the world. The safety problem is very real out there. We have a tremendous amount of uncontrolled airspace, where there is a great deal of cause for concern. So I simply urge that we do not overlook that aspect of this problem.

Many government officials may claim that deregulation has been favorable for the airline industry, but the consumers say something else—and I might add that we, too, are the consumers. In particular, our smaller communities and rural areas have been drastically effected over the last nine years of deregulation, and the problems continue to worsen. The only assurance that air transportation continues to be available to the less populated areas is the Essential Air Service program, which guarantees the smaller communities a certain level of air service. I would like to add that if we in Congress do not act quickly to extend the EAS program before it expires next year, air service will no longer be provided to many of our nation's smaller communities and rural areas. But I know that is a subject for another day and will revisit it then.

Again, Mr. Chairman, thank you for holding this a very necessary hearing. I am looking forward to hearing from today's witnesses and hope to gain further insight into the problems relating to the safety of this nation's air service. Thank you.

The **Chairman**. Senator Kasten, you are next.

OPENING STATEMENT BY SENATOR KASTEN

Senator **Kasten**. Mr. Chairman, I understand the vote is on. What I would like to do if I could is to summarize my statement in about 30 seconds and ask that the remainder of the statement appear in the record.

The title of these hearings includes the concept of re-regulation of the airline industry. While I do not believe that we should go back to the rate and the route regulation of pre-1978, I have to admit that I am disturbed by the state of the industry today, including the practices of the airlines.

We are going to look into the quality of services at our next hearing, but deregulation of the industry is not the only culprit in this whole scenario. Congress and the FAA have to take a major portion of the blame, particularly in the safety area which we are looking at today. Because of funding shortfalls, management problems, and external forces such as the surge in traffic, we are operating an overburdened system in the 1980s with a system equipped for the traffic of the 1950s and 1960s, often with the hardware of the 1950s and the 1960s.

I believe that we must pay careful attention to the question that the Chairman raised when he talked about capacity and the controls at airports. Hubbing and the huge increases in flights and travelers may dictate mechanisms for some flight restrictions at major airports. There is no argument that this new pattern of flights contributes to congestion, which impacts safety.

I am hoping particularly that we are going to be able to look, Mr. Chairman, at this whole hubbing and concentration of power issue at the various key airports throughout the country.

I ask that my statement appear in the record as if read, and I thank you very much, Mr. Chairman.

[The statement follows:]

Opening Statement by Senator Kasten

Thank you, Mr. Chairman. The series of meetings that you have scheduled for the full Commerce Committee on the safety, quality of service, and future of the air transportation system is one more indication that the American people are demanding that we must find whatever is broken in this system and come up with some fixes. The title of these hearings includes the concept of reregulation of the airline industry. While I don't believe that we should go back to the rate and route regulation of pre-1978, I must admit to being quite disturbed by the state of the industry today, including the practices of the airlines. We will look into the quality of service matters at our next hearing.

However, deregulation of the airline industry is not the only culprit in this whole scenario. Congress and the FAA, particularly in the safety area that we are looking at today, have to take a major portion of the blame. Through funding mechanisms and shortfalls, management problems, and external forces such as the surge in traffic, we are operating an overburdened system in the 1980's with a system equipped for the traffic of the 1950's and '60's—often with the hardware of the 1950's and '60's.

Even in a deregulated environment it is our duty to ensure that health and safety of the public is protected. If there are economic pressures of competition that could result in improper compromises being made in the area of safety, we have to assure that we have a system that can catch and punish or correct such behavior. We have safety regulations that are totally appropriate even in a deregulated industry. If there are different or more measures necessary, then a professional and strong FAA should have the resources to so function.

In the area of SAFETY, it seems that Congress has to assume responsibility. The FAA has to have the resources authorized and appropriated to it to assure there is a sufficient number of inspectors. These inspectors and support personnel are to catch inappropriate maintenance and operating practices before a safety problem arises. The GAO and FAA have taken measures to keep the inspector corps from getting too close to the parties they are to be policing. The numbers are growing as well.

In addition to inspectors, the necessary improvement of the air traffic control system also rests largely with the Congress and the administration. The NAS Plan is behind schedule and over budget. So we are operating in a computerized electronic age with transistors. Navigational and control aids and equipment need to be brought on stream. More highly qualified people have to be brought into the system.

All of this takes the policy coordination of the Congress and administration and the funding of the programs.

Hubbing and the huge increases in flights and travelers may dictate mechanisms for some flight restrictions at major airports as there is no argument that this contributes to congestion which impacts safety, but there are options such as landing fees priced according to peak hour or low density times and selling or leasing take-off and landing slots. In such a market oriented system, the smaller companies and new entrants that were to be encouraged to develop in deregulation must be protected.

I look forward to hearing from our witnesses today, and look forward to the next hearing dealing with the service problems where more "reregulation" has been undertaken in both houses of Congress.

The CHAIRMAN. I thank you.

I think we should take a recess and come back.

Senator ADAMS. Mr. Chairman, I do not have a statement. I will just say since deregulation safety has gone down, service is poor, fares are incomprehensible. We have turned subsidy upside down, and it is time to do something about it. I agree with you.

The CHAIRMAN. Well, you write the report, and we will adjourn this thing.

We will be in recess.

[Brief recess.]

The CHAIRMAN. Ladies and gentlemen, the committee will please come to order.

We are pleased at this time to have the Chairman of the Appropriations Subcommittee for Transportation, Senator Lautenberg. We would be delighted to hear from you at this time, sir.

STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM NEW JERSEY

Senator LAUTENBERG. I thank you, Mr. Chairman, and commend you and the chairman of the Aviation Subcommittee and all the members for your interest in the whole problem of aviation safety and better transportation. This is not a new thing with you, and I appreciate the opportunity to participate with you this morning.

In the interest of the committee's intention to maintain on-time performance, I will try to keep my comments brief.

Mr. Chairman, initiating this look at the state of the airline industry is critical. The safety of our Nation's skies and the effect of deregulation is something that we are still trying to get a grip on. It has been almost 10 years since deregulation began. To say the least, it has been a decade of tremendous change. Unfortunately, over the last two years some of that change has been for the worse.

Many are asking just how we got where we are today, Mr. Chairman. Some would point to deregulation itself, but we have to draw some distinctions. When Congress deregulated the airline industry, it deregulated fares, and it deregulated market entry. Deregulation promised lower fares and new competition. We should not abandon these goals.

What the Congress did not deregulate was safety. It did not deregulate basic consumer protection, and it did not deregulate anti-monopoly protection. Unfortunately, that is the kind of deregulation that this administration has given us. It could not have come at a worse time.

With the new competition deregulation brought, airlines were pressed to cut corners and tempted to cut costs, whatever they were.

What has the consumer gotten out of it? Better service? Hardly. The passengers have been taken for a ride, a different kind of ride than they bargained for when they bought that ticket. They have been delayed. Their baggage has been lost. The food service is worse, and they have not been given information about which airlines fly on time with their bags on board the same airplane.

Has the consumer gotten safer skies? This is a principal question. The indicators say certainly not. Near misses, as we have heard and as we have seen, have reached alarming levels. All the safety data given to us gives us cause for serious concern.

Now, how about maintenance? When we see broken seats or unclean aircraft, does that signal an unsafe plane? Does it tell us that safety maintenance is also being put off? Perhaps, but we really cannot tell.

Is there more competition? Well, there was. But most of the newcomers have fallen by the wayside, and instead of counting new entrants, we are counting casualties. There is more and more concentration of markets. Decreasing numbers of airlines are carrying increasing numbers of passengers and with each reduction in competition comes the threat of higher fares and diminished service.

A deregulated airline industry required even more vigilant safety and consumer protection than before, and instead we have gotten less.

Mr. Chairman, when people call for re-regulation, my bottom line is this. We need to put teeth back into the regulation that we never intended to take away. We need to put teeth back in the oversight of safety, and we need to put teeth back when it comes to consumer protection. We need to put teeth back in promoting and protecting competition.

Mr. Chairman, a free market can produce tremendous benefits for the consumer. But a free market needs policing. Consumers need to know who is performing and who is not. Consumers need to be shielded from deceptive advertising and misleading schedules.

The picture is not all gloomy. There are some bright spots. Under relentless pressure from the public and the Congress, DOT at last has begun to do its job, and the airlines have responded. Some schedules have been modified to reflect reality. Delays in September were down 41 percent from a year ago. Although things are far from perfect, my Frequent Losers Club memberships are down this year.

The Congress is taking steps. Hopefully, we will see important aviation bills on the Senate floor in the coming weeks. These bills will help protect the safety of our skies and provide more protection for our consumers. Several of us have joined in with the introduction of S. 1600 which would free the FAA from the daily political pressures at DOT and provide the long-term stability the agency needs and deserves.

Mr. Chairman, what the Congress is doing now is sorely needed, not because deregulation was a mistake, but because the administration has taken deregulation where it was never supposed to go.

I thank you for the opportunity to be with you this morning.

The CHAIRMAN. We thank you very much, Senator Lautenberg.

Any questions?

Thank you very, very much.

We will move, then, to our FAA Administrator, Mr. T. Allan McArtor.

Mr. McArtor, in coming to the witness stand, these hearings, in all candor, are for you as well as for us. I know I am going to learn a lot, but we hope you do too. I think you are an outstanding appointee, but with this type problem, in the last few weeks, you have been like the Dutch boy at the dike, running around, trying to improve the PR image, trying to get on top of the owners, trying to look at the manufacturers of the planes, trying to look at this, that and the next thing.

I think the message should result from these kind of hearings that there is no shortage of money. Jim Miller at OMB has probably never had a hearing on aviation and knows nothing about this problem. He just looks at a categorical figure of X billion, and that sticks out, the Airport and Airway Trust Fund. He tells the Secretary not to ask for so much over an amount, because we need that.

That money is already allocated, and we just do not want to have that kind of nonsense going on. The money is there, even far more than what is needed to fulfill existing obligations. The American public is willing to spend money for safety. I think that is fundamental. We can get the funds for it, and we should get the funds for it.

So I think we can disabuse the Federal Aviation Administration with any idea about financial restrictions. We do not want to intimate that you just throw money at it, but you can see time and again an increase in activity and a shortage in controllers and the market forces on completion at hub airport.

From an experienced pilot's standpoint and having run an airline yourself, does the hub system really give the maintenance crew on the ground and the pilots themselves time to check around and see that their equipment, for example, is airworthy?

There is a big scramble. Everything jams into Charlotte, and everything jams into Atlanta. I see it. And we saw what happened up in Detroit with the Northwest accident.

These are the kinds of things from your depth of experience—and from the experience we have on the other end of the line—that make you realize you really have a crisis on your hands. There is no question about it.

I do not think we have years to study this mess. We do not want to go about it in a helter skelter fashion. We want to be deliberate, but that is what these hearings are for—your good as well as for anybody else—so that we can work together and begin to solve these problems in a deliberate fashion without any preconceived notions of regulation or deregulation.

I am not hearing any of the advantages of deregulation. I hear Senators profess, oh, it is something like a credo up here. None of us want to go back.

I would love to. Before deregulation I had three direct flights and three back to Charleston, South Carolina, and those slots were taken over by another airline—and that service ended. That service was founded on public convenience and necessity. Your FAA created those slots, and the CAB allocated them. Now they have been sold off by OMB in an economic situation. So I am being hubbed and charged more than before.

I always asked Senator Cannon, the former chairman, if we were looking out, but we cannot get our nose into everything. Now we are finding that 85 percent of the small and medium-sized towns of America are subsidizing 15 percent of the Las Vegases. Somehow, that is going to have to be worked out because that is not in the public interest.

Let me hear from you and see what you think.

To get back to that pilot, how do I get on a pilot that is being told by a chief pilot not to report unsafe conditions. How do I solve that problem; the maintenance problems; the hub problems? These are the kind of things that we want to hear from your expertise—how you think they should be handled and how the Congress can work hand in glove with you. We do not want to be telling you. In fact, if you could solve them by yourself, we would be pleased. But how can we help you?

Let us hear from you.

STATEMENT OF HON. T. ALLAN McARTOR, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Mr. McArtor. Mr. Chairman, thank you very much. I am very pleased to be here. I welcome these hearings and welcome the opportunity to participate in these hearings.

I would like to begin by expressing my very sincere appreciation for the concern of this committee on major aviation issues and to express my appreciation to you, sir, personally for your leadership and the leadership of Subcommittee Chairman Ford on aviation issues and also to go on record in saying that I truly appreciate the very professional staff that the committee and you have personally and the working relationship that we have with your staff.

I have a written statement that I have submitted for the record.

The Chairman. It will be included in its entirety, and you can highlight it as you wish.

Mr. McArtor. We are here to comment on the impact of deregulation on aviation safety. Now, if you define aviation safety in terms of accidents or fatalities, statistics would show that there is a sharp decline in both. This decline, in all honesty, has been going on for 30 years and continued after 1978.

From 1978 through 1986, the number of fatalities per billion passenger miles had fallen from about 1.6 to almost near zero. Then, of course, we had the tragic Detroit accident here very recently.

I do not choose to define safety by the absence of accidents or fatalities. I define safety as exposure to risk. So what is important to know is whether deregulation has impacted exposure to risk in our Nation's airspace.

Now, when we look at deregulation, we also have to understand the other things that have run parallel with deregulation since 1978. Our economy rebounded from the recession of the early 1970s. Fuel prices dropped. The 1980–81 deregulation of oil prices helped cut energy inflation from a high of 31,000 down to a negative 13 percent in 1986. This resulted in a marked increase in general aviation activity.

Interest rates went down. This encouraged major capital programs for our air carriers.

Just as the stimulus of deregulation began to take hold, we experienced the controller strike in 1981.

Now, when we look at the benefits of deregulation, I think most people will acknowledge that it is impressive that we will fly over 415 million Americans this year on our scheduled air carriers, and they will enjoy in air fare cuts a real savings of some 20 percent per passenger mile. We have had new air carriers enter the marketplace. We have created new industries in the air freight business. Our focus today, however, is on the phenomena of deregulation and the impact of that phenomena on exposure to risk.

What are some of the effects on the aviation system of deregulation? Probably first and foremost, and we talked about it earlier, is the hub phenomenon, the operation out of hub airports. Air carriers went from 39 to over 100 in number, and you should realize that during this deregulated period we actually certified 210 air carriers. Obviously, many did not survive.

Commuter aircraft went up. In fact, the number of planes in the system has actually risen about 20 percent.

We are experiencing mixed fleets. Different gauge aircraft are being operated by the different carriers. In both these large and small aircraft, the average seats per aircraft has increased some 30 percent, and we actually have experienced a lot of mixed fleet operations.

Routes changed, as was mentioned here earlier. Some communities have more service; some have less.

Competition increased, obviously a phenomenon of deregulation.

Mergers occurred, with their attendant labor/management issues and pressures of meshed seniority systems.

Some carriers experienced very rapid expansion.

We had a mix of fast and slow aircraft around major metropolitan areas. This translates most of the time into large and small aircraft.

Noise issues became more pronounced.

Pilot shortages began to show up in certain instances.

More contract maintenance occurred within the industry. Some older aircraft found themselves refurbished and re-engined and continuing in service. New aircraft and re-engined aircraft have increased.

Delays have increased.

In addition, our airline executives found themselves in a new operating environment. The FAA as well found itself in a new operating environment. Where our mission previously had been pretty much the separation of aircraft, we now not only separate aircraft but we have to actually manage airspace capacity.

These deregulation phenomena that I just mentioned are not inherently unsafe, but without question they have created pressures on the air system.

Hub airports became crowded. We experienced peak hour activity.

Traffic counts rose. We in the FAA found ourselves with a tower staffed to a certain level. Suddenly a hub airport emerges at that airport, and our staffing is suddenly below level, and we have to send more controllers in.

We have more aircraft in the system and different gauge aircraft in the system.

The sum experience of the pilots has decreased across the board.

Smaller aircraft have replaced larger aircraft on some city routes.

The employee morale at some airlines is down. There are pressures between labor and management. We have had slowdowns. There have even been instances of sabotage.

We have had to adjust to nonstandard procedures in the industry when two airlines merge together, with two pilot forces.

Ticket prices, of course, have plummeted. There has been cost cutting in the industry; lower wages; in some cases, reduced spending on engineering and safety departments. There are fewer spare parts in our system. There are very few reserve crews and even fewer reserve aircraft.

While service seemed to struggle during this period from 1978, the FAA has actually done a fairly remarkable job in maintaining safety and security within the Nation's airspace while at the same time trying to rebuild.

To meet these system pressures, the FAA has taken dozens of positive actions to insure that no increase to this exposure to risk exists. For instance, let us take the phenomenon at the hubs.

We have more controllers coming into the system.

We have had an expanded east coast plan, airspace management, which was brought on by the hubbing phenomenon at Newark.

We have rules with regard to our terminal control areas, Mode C intruder alerts, transponders. We are attempting to install more ILS's. We have the threat alert and collision avoidance technologies being accelerated. We have an emphasis on what we call the MEL, the minimum equipment list, and an effort right now in which we are currently working to better design that regulation so that it adjusts to the hubbing phenomenon.

The increase in commuters was countered by a complete rewrite of Part 135 of the Federal Aviation Regulations. There was a marked safety improvement in our commuters after that, and we recertified all the carriers to meet those new standards.

We are encouraging the use of simulators to train pilots in our commuter industry and are considering waivers in order for them to use these simulators.

We have put in tough enforcement programs. We have actually pulled the certificates of some airlines.

We have more inspectors going into the field.

The increased number of carriers put pressure on our safety surveillance system. In order to certify new carriers, we have gone back and provided national guidelines where we now have a centrally managed surveillance program.

The labor/management issues in our air carrier industry are of great concern to me. We focus more inspectors on those carriers that are experiencing those kinds of problems. Each time we sense a labor/management issue, we design a special program specifically for that.

When you merge pilot forces together, you create work rules or you create an operational environment that is foreign to some, perhaps familiar to others. That is why I have called for an increased emphasis on crew management procedures, pilot training and cockpit coordination. Each time there is a merger, we require a written merger plan.

Regarding the pressure of competition, I think some carriers have gone too far. We saw that in the very large fines that we have had over the last couple of years.

These fines, though, have actually done their work because now we see a better response to our surveillance program than we had before. We actually do not expect to see major problems in an airline when we go in to inspect. We find several minor things most of the time.

More inspectors simply are not the solution. We cannot expect to add more inspectors and "inspect in" safety into the Nation's air space. You cannot "inspect in" quality into anything. So I have called for an accountability on the part of airline executives to actually report compliance with FAA-approved maintenance programs and operation programs. This year we are going to be developing a quarterly report and an annual report where the air carriers will be responsible for reporting compliance with these programs.

So while there have been and still are pressures on safety, the margins of safety have been preserved by both the FAA and by the efforts of industry. More initiatives are being pursued as part of the initiative I have created called Impact 1988, which are those eight major issues on which we expect to attain a positive impact in this fiscal year.

Deregulation has caused pressures on aviation safety, but, although statistics bear out that there appears to be no adverse correlation between deregulation and safety, we still continue to provide very focused attention and efforts as long as we have the resources to do our programs to prevent any increase in this exposure to risk.

Thank you for allowing me to make some comments. I would be pleased to answer any questions you may have, sir.

The CHAIRMAN. Well, there is no question you have a wonderful historical knowledge and a tremendous understanding, and that is important in your role.

I remember at the beginning of the war, the colonel looked at me and said, Lieutenant, excuses, excuses. I can think up a dozen better ones. Get the hell out of here and get it done. We got it done. So I have that same kind of feel.

Rather than all that understanding, I am looking for safety. Specifically, let us talk controllers. Do we have enough?

Mr. MCARTOR. We do not have enough to meet the growth. That is why we have asked——

The CHAIRMAN. Then how do you expect to meet that growth?

Mr. MCARTOR. With respect to controllers, I would like to raise a couple of other issues.

Controller numbers is only one piece of the puzzle. We have to do a better job of recruiting, hiring, training and retaining air traffic controllers. We rely too much on on-the-job training, OJT. We have a much higher washout rate than I am comfortable with or is prudent.

After they leave our basic facility and go into the field in an operational facility, we rely on OJT. That is an effective but an inefficient way to train, and it takes too long. We get a higher washout rate. We have to use simulators just like we so effectively use to train our pilots. We need simulators to train our air traffic controllers in an advanced training program so that after the advanced training we can send them into an operational facility, and have a compressed OJT. The time from training end-to-end is compressed, and the controller retains more.

The CHAIRMAN. Someone will come up immediately, Mr. McArtor, and tell you that you are right, but that is long range. While we are starting that long range of training and using the simulators and everything else, we know of a lot of very well experienced controllers that were find after the 1981 PATCO strike.

What about bringing them back on in the particular emergency period, while we go about this long-range simulation, hiring, training, educating and everything else? I am trying to get a solution now rather than setting out on something that is going to take effect a year or two years from now. We need it this afternoon.

Mr. MCARTOR. Yes, sir. You and I share the very same concern. We are training at our maximum rate in our training facilities with the methods with which we train right now.

We would have to retrain a controller that has been out of the system for some six years. We actually run a different airspace system than we did back in the prestrike era. So we would have to retrain them as well.

Also, we run very much of a teamwork environment. Just like you have to have teamwork in a cockpit, our air traffic control system requires person-to-person interface and teamwork. I am not sure that the fired controllers present any value added to that teamwork.

What is interesting and something which we are pursuing right now is the use of recently retired controllers who are current on the sectors, current on the equipment and who could come back in at peak hour times, rush hours if you will, and help us maybe in the morning and the evening at those particular low staff sectors.

To do that, though, we are going to have to modify some of our pension rules so that they can be allowed to come back in as part-time employees. We are pursuing that right now.

The CHAIRMAN. How many controllers do we need?

I think there will be testimony later this morning that around 3,000 more are needed. Do you have any idea?

Mr. MCARTOR. It is all dependent on growth. It is all dependent on how many of these new terminal control areas, TCAs, that we might put in, how many more new radar facilities we might put in.

In addition to numbers of controllers, I need more workstations for those controllers to work. I need more radar screens at which they can work. I think we have perhaps thought that we could make do with the equipment that we have until the NAS Plan brought us newer equipment, but I have to buy more old equipment so that we can have more workstations so we can have places for the controllers to work.

As more tower cabs come on line, as more radar services come on line, as the industry continues to grow, we do need more controllers. I cannot answer whether it is 3,000, but I intend to train at the maximum capacity that the FAA has to train until I feel comfortable that we have enough controllers in the system.

The CHAIRMAN. When do you think that will occur?

Mr. MCARTOR. I would hope, sir, that with the introduction of this new training, the use of simulators, which I would hope to have in place perhaps at the end of this fiscal year, to have the program in place and maybe be fully into it the year after that. A three-year target is probably reasonable to have enough controllers in the system where we are then able to man for the way that we operate.

I will give you an example of that.

The CHAIRMAN. Let me agree with that, because I want to limit myself to five minutes so we can pass this around.

Let me get right back to that controller. Now, you fly yourself still?

Mr. MCARTOR. Yes, sir.

Mr. CHAIRMAN. You are totally familiar with taking some of those experienced controllers that were fired or otherwise retired. You would not need that much training, a couple of weeks or whatever it is, to bring them up to speed. Could you do that in two or three weeks?

Mr. MCARTOR. Are you talking about the fired controllers?

The CHAIRMAN. Fired or retired controllers.

Mr. MCARTOR. No, sir.

The CHAIRMAN. You could not bring them up to speed in a three-week period?

Mr. MCARTOR. No, sir. We cannot even take a full performance controller out of one facility and in two or three weeks make them full performance in another facility.

The CHAIRMAN. How long does it take?

Mr. MCARTOR. When you transfer like that?

The CHAIRMAN. Yes, sir, or bring in one of the fired controllers. How long would it take to bring him up to speed?

Mr. MCARTOR. It is difficult to generalize on that, depending on what the facility is; but it could be a three-month process to a six month process.

The CHAIRMAN. Let us at least look to that three months. During the three months, then, we start bringing them on and satisfying the problem before we have to wait three years.

Mr. MCARTOR. Yes, sir, but also we need to realize that in the six years that has transpired from the strike, that is about a third of the retirement schedule of an air traffic controller, the 20-year schedule. Many of those fired controllers actually are very close to retirement age, and we find a direct correlation between controller effectiveness and age.

So as long as we are training to maximum capacity, I would prefer to have the younger recruit and train them and move them into the field to make them productive controllers. I do need, however, to revamp our controller methodology.

The CHAIRMAN. I do not want to minimize the problem, but I do not also want to have a problem for every solution. We have to move better than a three-year program. That is not to say anything is wrong with that three-year program.

One final question, and I will yield to Senator Ford.

What do you need from us with respect to controllers? Anything?

Mr. MCARTOR. One is a renewed understanding of——

The CHAIRMAN. I have the understanding. Do you need any money or a change in current law?

Mr. MCARTOR. The phenomenon is that if there is a shortage of air traffic controllers at any given facility, we do not allow that controller shortage to impact safety. It may impact capacity, but we do not allow it to impact safety.

In order to accommodate growth in our commerce in our Nation's air system, we need more controllers to accommodate growth. We do not want lack of controllers to be a limiting factor on that.

The CHAIRMAN. There is a fundamental difference, Mr. McArtor, because you say the margins of safety have been maintained or improved. We do not have that feel, and that is why we are having these hearings. We like your approach about the exposure to risk rather than the statistical answer, X miles traveled and number of fatalities or whatever.

So that is why we are having these hearings. I think the experiences that we have had bear out that it is necessary to move faster than what we may have in mind. There is nothing wrong with the three-year program. Let us at least look at the three-month approach and put former controllers back to work.

If money is needed or a change in law needed or whatever else is needed, tell us about it, because we want to re-establish the confidence of the traveling public.

Senator Ford.

Senator FORD. Thank you, Mr. Chairman.

Mr. McArtor, if the Trust Fund was put off budget and you were allowed to use that total trust fund for what it was intended to be used for, could that expedite some of the problems that you see?

Mr. MCARTOR. We have had access to the resources available to us with which to solve aviation problems, the trust funds.

Senator FORD. You have had access to the trust funds subject to what Jim Miller says over at the OMB.

Mr. MCARTOR. That is correct, sir.

About half of our operating budget comes out of the general fund, so by taking the trust fund off budget, we would have to absorb any budget cuts in the operations area directly. It would take muscle and bone at the FAA. So that split system would be very difficult for us to manage.

We have had access to trust fund moneys to apply against the NAS Plan programs and to invest in airports. Now, could we invest more money in airports? I am willing to invest as much money for airports as we have the capacity to manage, and I am willing to increase our capacity to manage more dollars.

We have over a $3 billion backlog in bonafide, justified airport improvement programs, so we could apply——

Senator FORD. With a $3 billion backlog and a $5.6 billion surplus, you have $2 for $1, have you not?

Mr. MCARTOR. Yes, sir, but we also would not want to deplete that trust fund strictly on that. We have to use that trust fund for both capital expenditures, some operations and airport improvement programs.

Senator FORD. I understand that very well, but the 8 percent is increasing every day because you have more passengers. There are 415 million passengers this year at 8 percent, whatever that ticket is worth, increases the amount going into the trust fund.

Even with the reluctance of OMB, they have allowed us to increase the trust fund expenditures as it relates to capital construction anyway by 60 percent. I think one of the greatest contributions Mr. Burnley has made is when he fussed at Senator Lautenberg, and Secretary Dole came back and said we are going to yield on the 955 new controllers you wanted which we stonewalled on.

So there is something out there that we need to look at as it relates to the ability to spend the money. You have asked for a $150 million authorization from a $200,000 authorization, and that has been given to you. That, in itself, indicates that you want to handle more money and spend more money and have more authority.

These hearings then become more important because you have just been granted a $150 million authorization. You just sign your little name down there and, boy, $150 million goes lots of places. If it does not go to Kentucky, I will have you back up here twice.

Mr. MCARTOR. Yes, sir. The speed with which we employ resources was a great concern to us, and I am very appreciative of the understanding we have with OST now to be able to streamline our procurement procedures so that we can get equipment into the field much quicker.

The amount of money we are employing in most cases matches our ability to employ those funds at that particular time. Now, is more money required? Yes. I would fully imagine that if we developed a simulator training program for the controllers, that will be an additional resource request.

Senator FORD. I do not think Senator Hollings or Senator Exon or Senator Stevens and I would object to spending additional funds for greater safety in the air.

Mr. MCARTOR. Yes, sir, and I have taken the advice of both yourself and Chairman Hollings in that if we are limited in resources, I will be the first one to come up here and appeal to you for those additional resources.

Senator FORD. Let me ask you this. GAO was skeptical of the ability of FAA to install a Host computer. I respected their judgment. I believe Mr. McClure said that he did not think you could do it. He went back out to Seattle. It was in, it was working, it was an improvement, and he was wrong.

Now, the goal was to put in the 20 Host computers, I think, by the end of the year. You are going to inaugurate the fourth one in the next few days in Leesburg?

Mr. MCARTOR. Yes, sir.

Senator FORD. Will you have the 20 Host computers in by the end of the year?

Mr. MCARTOR. Yes, sir, we will.

Senator FORD. That expands the ability of the controllers as it relates to their dealing?

Mr. MCARTOR. Yes, sir. It is a much faster computer with better response time and much higher capacity. These Host computers are going in right on schedule. It is a very successful program. They are being commissioned right on schedule. They will be in by the end of the year in all of our en-route facilities.

This allows us then to load in additional software programs, like what we call the mode C intruder alert program, which is an additional margin of safety around terminal control areas. So that is a very successful program, the Host computer.

Senator FORD. Are these Host computers enough? Are the numbers enough?

Mr. MCARTOR. The numbers are enough because we have one in each en-route facility. Of course, we have additional sophisticated data systems coming on with the advanced automation system, which is another part of the NAS Plan.

Senator FORD. How many ports for controllers?

Mr. MCARTOR. One of the things that we must continue to do is to create the periphery to the Host computer. The Host computer right now is a faster, higher capacity computer, but it does not allow us, as I had mentioned to you earlier, to put more workstations in the system. So I have to develop the peripherals to the host computer as well as to be able to procure more of the old type controller screens.

Senator FORD. I will stop, Mr. Chairman. I know there are others waiting, and there are so many things I would like to ask Mr. McArtor.

You see, we cannot allow competitive pressure on airline carriers to erode the margin safety needed to maintain and upgrade our air carrier fleets. This comes from your statement.

I will continue to insure that the needed numbers of aviation inspectors and so forth are available to meet new and changing industry requirements as air commerce grows.

The Senator from Massachusetts, Mr. Kerry, a few moments ago said Boston had 170 controller vacancies. In your statement, you say that you have all the slots filled.

Is that just the number you have and you put the number of slots that are available and they average out to fill all of them, which means you have more vacant slots in one place than you do in another?

Mr. MCARTOR. No. The Boston facility is a facility which needs a great deal of work with respect to manpower. We are using far more overtime there than we ought to. We need to get more controllers into that facility, and I am very concerned about that. We have a handful of those around our system.

In general, our overtime averages across the system are not that bad, but I do not like to use averages, either, any more than I like to use safety statistics that way.

Senator **Ford**. In your statement you say we have enough controllers for every position. I am concerned about our available strength and reserves.

Mr. **McArtor**. For the active positions and available screens that we have.

What we are struggling with, though, is to have enough to fill a full shift capacity and have enough for sick leaves, for vacation time, and for training. The Boston facility is an example, probably our primary example, of where we need to have more controllers.

Senator **Ford**. Well, the equipment you have today is not sufficient for tomorrow, is it?

Mr. **McArtor**. No, sir, but we have a gap that has formed. We cannot ignore the fact that we have a capacity problem that we must address. That capacity problem now is not only manpower, controllers, it is workstations. It is also technicians that we have to work on our equipment.

We cannot wait for the NAS Plan equipment to come in in the 1990s and bail us out. We have to go back and understand the capacity limit and the challenge that we have right now by continuing to do more with our current system in order to meet the capacity needs in this gap. A gap has formed now.

Senator **Ford**. I think the FAA allowed the gap to form by not having the ability to complete the NAS Plan early on before you came on board. It is similar to the other problems that we have where FAA just has not had the facilities or the technicians. They have the expertise, but they are spread so thin. That happens all over the system, and I think that worries all of us.

Thank you, Mr. Chairman, for letting me have the extra time.

The **Chairman**. Senator Exon.

Senator **Exon**. Thank you.

Mr. McArtor, you can see, do you not, that at least at some of our hub airports we have less than adequate control from a safety standpoint today with regard to the traffic that is coming in and out, especially with regard to certain hours?

Mr. **McArtor**. No, sir, I cannot say that with respect to safety because we limit the capacity to match safety. We are at operational limits in several instances in sectors and airports and towers, but we maintain the operational limit and do not allow it to get into a safety red line condition.

What we do not have is the ability to manage the capacity, the demand on the system. That is a limit not just for the air traffic control system but the airport system itself.

One of my Impact 1988 initiatives is to try to elevate this airport debate so that we can modernize and expand and build new airports. We have to bring that into the equation as well.

The reason we experience so many delays in the hub cities is that, there are more aircraft that want to fly into those hubs at a given hour than can be adequately handled by either the airport or the air traffic control system.

It is not a safety issue. It is a capacity issue.

Senator **Exon**. You are testifying today, so that I understand and the record can be clear, that as the FAA Administrator, you do not believe that as of now there are too many flights scheduled at any hour of the day into any airport in the Nation that adversely affects safety? Is that what you are testifying to?

Mr. McArtor. I do not want to——

Senator Exon. I do not want to fluff around these things, Mr. Chairman. I think if no one else can tell us that, then, indeed, we are in trouble.

I think I phrased the question to you. I know you do not want to answer it, but I am trying to get down to the crux of the situation.

Mr. McArtor. I am anxious to answer your question.

Senator Exon. Thank you.

Mr. McArtor. But you said are there more aircraft scheduled into the airport than can be safely handled. We are mixing this service issue, the scheduling issue, with flow control, our capacity to handle the system.

There are more aircraft scheduled at certain peak hours of the day than should be handled in the system, and we do not handle them in the system. That is why we have the flow control. It keeps them on the ground until we can bring them into the system. That is where some of the delay is created.

So there are more aircraft scheduled into some airports than can be handled, but we do not allow them into the system. We feel that we have the capacity of the system understood, and we will not allow airplanes into the system unless we can handle them, and that creates some of the delay that we experience today.

So that is why I was playing with your question a little bit there, to understand the difference between scheduling and the flow control phenomenon.

If I felt, though, that we had more airplanes in the system that presented a safety risk right now, we would take action this afternoon. I think you have seen that I have no problem at all taking immediate action if I consider there to be a near and present danger with regard to safety.

Senator Exon. Then if I understand you correctly, you are telling me that the scheduling problems, from a safety standpoint, even though there are some flights overscheduled into some airports of the country, are corrected by your direction to keep some of those flights on the ground elsewhere so that we do not reach a critical safety situation in the hub airports. Is that correct?

Mr. McArtor. That is correct. I think there has been an unrealistic expectation on behalf of airline schedules in the beginning. It has stabilized now a little bit more, I think. The airlines have recognized their responsibility for more truthful scheduling and have done so and are also exploring the ways to try to schedule off-peak hours into some of the major hubs.

I also have to confess that there is not as much latitude for rescheduling on behalf of the airlines as you might think because these hubs must operate. You have to exercise that hub on a cycle, say six cycles a day, and there is little latitude to move some of those airplanes further into a later morning hour perhaps because then you lose your ability to flex the hub.

So there is going to continue to be pressure on peak hour scheduling for some time.

Senator Exon. Are you then saying, Mr. Administrator, that the airlines are scheduling and are granted more slots into hub airports today than can be adequately handled from the safety standpoint?

Mr. McARTOR. Well, there are slots into an airport, Senator. The slots are established to maintain a disciplined capacity. It is a means by which—I want to be very careful about expanding the slot rule around other airports.

But yes, there are more aircraft scheduled at certain hours of the day that if we were to allow them into the system, it would create an unsafe system, if it were allowed.

But we are simply not allowing them into the system, and I think the airlines are experiencing that, and they understand that we are not going to do that, and they are working with us, actually, very closely, in trying to design reasonably scheduled flights, and publishing those schedules so that the air carrier or the air passenger is also aware of the reasonableness of the schedule.

Senator EXON. Do you believe that the major airlines today that monopolize the flights in and out of the major hub cities of America are realistic in the number of flights that they have scheduled into hub airports?

You have just said that they cannot all go in there at peak hours. Then, is that not false and misleading advertising at best, from the standpoint of these major carriers that are trying to confuse the travelling public, or fool them into thinking that they are going to deliver them at a certain time into O'Hare International Airport when in fact the airlines know they cannot meet that?

Is that right?

Mr. McARTOR. I think those schedules are improving. I think the airline schedules are improving as far as truthfulness in advertising.

Senator EXON. Are you telling me then in the last 30 days there has been a significant cutback in the number of scheduled flights that are going to arrive into the O'Hare International Airport at peak hours?

Mr. McARTOR. Well, I think we see a cycling. Of course, summer is our peak flying time. Then you get to Labor Day and the number of flights drops off historically. I mean, seasonally the number of flights drop off.

But the peak hour pressure is still there. The peak hours are still there.

Senator EXON. What are we going to do about that? Do you not have some responsibility in that area?

Mr. McARTOR. Yes, sir, I have got responsibility. It is a shared responsibility. It is a responsibility of the country to build airports, expand airports. It is a responsibility of the FAA to expand its ability to handle the airspace system.

A perfect example of that, I mentioned earlier, is the expanded East Coast plan, which put a three-lane highway in place of a one-lane highway.

And the delays on the eastern seaboard decreased by some 34 percent.

We are taking that same kind of architectural thinking, that innovative thinking, to a mid-continent plan, and to a West Coast plan, and to a plan that is specifically designed for the Southern California terminal airspace.

So we have a responsibility, yes, sir, in making sure that we are optimizing the airspace capacity. Like I mentioned, our mission used to be just separating aircraft.

Now it is separating aircraft as well as managing airspace capacity. So that is our responsibility.

But it is also the responsibility of the airlines to not unreasonably schedule or advertise schedules of flights that they know have a very small percentage of success of leaving on time or arriving at the designated time.

But I see that improving.

Senator EXON. Mr. Chairman, all that I can say is, I appreciate the answers by the Administrator. But I take it that we are getting nowhere fast, because I think this administration simply does not want to crack the whip that has to be cracked from two standpoints: safety, number one; and number two, protection of the travelling public that they do not get into a position where they are fooled that they are going to get to Chicago at a certain time, or Boston, or the other hubs, when actually they are not.

I am not being critical. But I am just saying that that is a responsibility that we have on this committee, and I think that you have. I do not think we are doing enough in that area, and I do not think we are being fully honest.

Thank you, Mr. Chairman.

Mr. MCARTOR. Well, I understand your concerns, sir. But I might say that the enforcement program that exists now, and the inspections, the history of inspections over the last couple of years, has been a very effective whip crack on the industry.

And it has worked. We have seen improvement in the program, and we expect to continue it.

The CHAIRMAN. Very good. Senator Stevens.

Senator STEVENS. I want to follow up on Senator Exon's comments. You do not have any control over overbooking, on-time flights, and other consumer issues in the FAA today, do you?

Mr. MCARTOR. No, sir. Oftentimes, we mix, of course, service issues with safety and security issues. I own two of those: I have got the safety and security piece.

But I am also very heavily involved in the service piece, the consumer issues. And I work very closely with the Department of Transportation to illuminate those problems, and also to look at solutions to those problems.

Senator STEVENS. Well, what you do has an impact on them——

Mr. MCARTOR. It certainly does.

Senator STEVENS [continuing]. But you do not really have the power to solve them?

Mr. MCARTOR. That is right. But I also am very much a watchdog to make sure that the service pressures, the competitive pressures on an airline, do not somehow bleed into, then, a reduction in safety or security.

So we are very mindful of these service pressures, but you are correct in that I do not dictate scheduling or consumer issues.

Senator STEVENS. Well, I thought we were really dealing basically with safety issues here today.

You are going to be followed by a gentleman from the GAO who will indicate that their studies show that re-regulation is not needed to meet the challenges of aviation safety.

Do you agree with that?

Mr. McArtor. Yes, sir. I do not believe that re-regulation—of course, when we say, re-regulation, that is a very broad word.

Senator Stevens. I am talking about putting back into effect some sort of CAB control, and all of the reporting and penalties for noncompliance with scheduled departure time and all that sort of thing.

Mr. McArtor. Right. From my point of view, I still have the same challenge. Because were we to re-regulate, I suspect we would re-regulate at system capacity.

We would allow slots, or we would have routes, whatever, that would meet system capacity.

Well, I run at system capacity anyway. So I still have the challenge of managing a growth in air commerce, in the Nation's air system; of accelerating the technologies and the management programs and the training programs, and all the emphasis I am doing right now, I still have to deal with.

Senator Stevens. I do not want to seem to beat at you, but I am going to do it anyway, all right? Every time you have been here and your predecessor has been here, I have talked about the problem of people who have through flights. That is, the people who come from my part of the country up in Alaska.

If we go down and attempt to make any one of the connections coming out of our State, and we fail to make the connecting flight, we find we are staying all night somewhere, that we do not have hotel reservations or new connecting flight reservations and a lot of other things.

But it seems to me that you are trying to deal with—the FAA is trying to deal with the loads in the major hubs on the basis of short flights rather than the long distance flights.

Have you looked at that since our last conversation?

Mr. McArtor. Yes, sir. As a matter of fact, after our last conversation I have asked our people to take a look at the wisdom of giving preference, priorities, to those longer flights, or trans-continental flights, or even international flights, as a priority within air traffic control.

Senator Stevens. Even an even break, because currently the break is the other way. The break is for the short hop that is going back and forth from Chicago to Indianapolis or Chicago to Kansas City, and we are trying to get through from Seattle or Salt Lake.

We have got to wait on the ground for a longer period of time in order to get into those hubs.

Mr. McArtor. It may seem that way, but we do not give priority to the shorter haul flights.

What appears sometimes when you sit on the runway, at the edge of the runway and waiting for number one for takeoff position, and you see three aircraft go ahead of you, and you wonder, why are they being allowed to take off while we are sitting here?

And the answer is, they are going east, and you are going west, and the western sector is saturated. We are not allowing aircraft to enter that sector until we can handle them.

This sector over here is not saturated, and they can take off to the east.

So it is a dilemma sometimes, and I experience it myself when I fly on the airlines. I wonder, why are they taking off when I am not.

Senator STEVENS. Well, it seems to me that unless that access is weighted by miles to be flown by the aircraft, that by the very numbers, there is going to be preference given to the short hop aircraft, because it is going to come into that hub three, four, five, six, ten, times a day, where the ones from the distance are coming in once or twice a day.

Mr. MCARTOR. Yes, sir, I understand the phenomena. But some of those people on that short hop may also be trying to make connection with the long haul flight that you just mentioned.

So it is a difficult capacity problem, but you bring up a very real issue, and that is, the service pressure or the difficult of a passenger flying in the scenario that you speak when they experience a delay and cannot make that connection.

So we are taking a look that, and I have not gotten back to you with an answer, but I certainly will.

Senator STEVENS. Well, I appreciate your taking a look at it.

I wonder about whether we ought to give you additional powers, rather than dealing with re-regulation and creating a new entity.

Why should we not give you a few more powers to deal with schedules, particularly when you know those schedules are really straining the capacity of your safety system?

Mr. MCARTOR. There are several proposals for going to slot allocations at dozens of airports. That, of course, would give market share from the government to assign—or auction to a carrier, rather than allowing them to compete for market share on day-to-day basis.

So before we would institute slot allocations at airports, I would want to very, very carefully look at the impact of that.

Senator STEVENS. Well, I do not know about my colleagues, but I opposed giving value to those slot allocations, which they now have.

I just want to close on one thing. It just seems to me that in this process there is an obligation somehow to get to the point where flight schedules are truthful.

They are competitive now. They are set up to depart at the same time, even though they know—many of them know they are not going to be able to leave at the same time.

That you know makes all airlines suspect. It makes more people miss airplanes. And the system cannot work that way.

I think, if nothing else, you ought to have a way, in the interests of safety, to deal with flight schedules, and if it means giving you more slot control, then that is it.

Mr. MCARTOR. Well, I am certainly pleased with the initiatives on behalf of the Department of Transportation to address that consumer issue, and to insist on accurate scheduling, and even in the publishing of average delay statistics for given flights.

I think all that is aimed toward the objective that you see.

Senator STEVENS. Thank you. I want you to know, again, I am glad you are where you are. You have got tremendous experience, and we need it.

I do not believe you deserve, yet, some of the criticisms coming your way.

The CHAIRMAN. Well, Mr. McArtor, I agree with that. But let me emphasize, number one, do not look to us for any kind of expertise in control. We are overscheduled right now with witnesses.

We have no chance at all of really thoroughly hearing from you today. I have got a number of other questions on my mind. It concerns, immediately, what the Senator is talking about with respect to giving you additional powers.

You say, and you use the expression, you run a systems capacity. Then why look to DOT? What we are trying to do in this government is fix responsibility, and if you are doing it anyway, and can handle it.

But then I wonder whether you can handle it. Because you say, well, we would have to go to auctions, or let the market forces—not at all. What about service? Convenience and necessity?

What was really allocated in the initial instance, all done and worked extremely well, on public convenience and necessity.

And now that is to be thrown entirely out of the window, and all we hear is market forces, market forces, market forces.

In cutting it off, here is what we—and this is one little issue about controllers. I asked back here, and I have gotten out the figure, as of August the 31st which are the most recent figures, we have got 13,854 controllers in the FAA work force.

Now, six years ago, in August of 1981, just before the strike, we had more than 16,000 controllers. Your own testimony is that, we have increased the number of commercial flights some 30 percent over that six-year period.

We do not think there was that much feather-bedding prior to August 1981. And using your statistical approach, is something wrong or going to break apart, or whatever it is, somehow, somewhere, and we are going to all be giving each other statistics.

I am not worried about an irate constituent. I am worried about a dead one. And I hope you will keep that in mind.

We will welcome you back at future hearings to go more thoroughly into some of these other points. Because that is just on one little point. We cannot get into the hubs, the mergers, and all of these other things.

But you can see as this picture develops, it could well be we would go ahead and merge in some additional authority. Because I think you can handle it if you are given it.

Thank you very, very much today for your appearance.

Senator FORD. Let me just get one question in on the record if I may, Mr. Chairman. And Mr. McArtor, I quote from your statement. I want to get past your demand for peak hour travel creates scheduling gains by the airlines unrealistically setting departures to capture market share, rather than improve their on-time performance.

Now, we are attempting to do something about that with our truth in scheduling bill that is out there on the floor. Now, capacity is a broad term also.

What is the number one problem under the nomenclature, capacity?

Mr. **McArtor**. Airports. Airport capacity. We have got more aluminum in the system than we have concrete.

Senator **Ford**. How much money do you think is out there if $1.6 billion is allocated this coming year, and goes up to $1.8 by 1990.

How much money each year is available then for airport expansion?

The **Chairman**. With that $3 billion backlog that you have attested to?

Senator **Ford**. Right.

Mr. **McArtor**. Yes, sir. I want to make sure I understand your question, Senator. The airport expansion programs, or new airport programs, the Federal monies are of course highly leveraged with State and local monies.

Senator **Ford**. Let us add that in. Because when we talk about $1.6 billion, I think if the figure we had in our bill, you add the State and local monies that are put in——

Mr. **McArtor**. Hopefully that will stimulate substantially more than the $1.6 billion.

Senator **Ford**. I understand that stimulates them, they pass a bond issue, $47 million for expansion. You have got cities that want to go ahead and bond and spend the money up front and hope they get it later.

And we have taken care of the question of advanced construction in our legislation.

Mr. **McArtor**. Well, one modification that I am going to understand better first, and then I am going to come talk about it, is, that half the monies that go toward the airport grant program are allocated to major airports on a ratio of emplanements.

Senator **Ford**. Absolutely. We are trying to expand to some of the smaller ones, also.

Mr. **McArtor**. They may spend that money on any authorized project, and there is a list of authorized projects. Some of those authorized projects are not, in my mind, capacity enhancing projects.

And there is a tendency on behalf of some of the airports to spend it on less critical projects, knowing that the FAA needing capacity will come behind it with discretionary funds to apply against the high speed turnoff, the additional apron, the runway extension, the additional ILS.

Senator **Ford**. You do not blame a good airport manager for that, do you?

Mr. **McArtor**. Not at all. But I want to make sure that we focus more money, and most of the money, on this capacity problem; not just the modernization problem, but the capacity problem.

Senator **Ford**. Well, that was one item. So if that is the major problem, as it relates to capacity, then I think the Chairman and I and others are on the right track. And if we are—if they are spending money for something different, the small airports I see are trying to put in luggage carousels; they are trying to expand their aprons; they are improving their lighting system; they are expanding their runways.

Those sort of things I think are important.

Mr. **McArtor**. They are vital to our Nation's airspace. These smaller airfields, regional airfields, are critical to the success of the national plan.

So we do not want to ignore the small airport and just pay attention to the megahubs.

Senator **Ford**. Well, I do not get to many megahubs. Kentucky does not have a megahub. We have got some pretty good airports in Cincinnati, Louisville, Lexington. But we have got a lot of smaller airports.

We do land in the mountains, and we are doing a pretty good job at it. There are not many crashes at Death Valley and Hazard and that sort of thing.

The **Chairman**. Senator Riegle, you do not mind us going to the next witness?

Senator **Riegle**. No, I think we should, Mr. Chairman.

The **Chairman**. All right, thank you very much.

And thank you very much, Mr. McArtor. We appreciate it.

[The statement and questions follow:]

Statement of Hon. T. Allan McArtor, Administrator, FAA

Mr. Chairman and Members of the Subcommittee:

I welcome the opportunity to appear before the Committee today to discuss with you the topic of aviation safety in a deregulated environment. At the outset, let me make clear my conviction that airline deregulation has been good for the United States. It has made airline transportation more affordable and, therefore, accessible to segments of the population never before able to fly.

Mr. Chairman, the questions before your Committee require careful deliberation. How we as a Nation answer them could well determine how competitive American commerce will be in the 1990's. Whether we have the courage to work together as a Nation to maintain the benefits of deregulation will determine how successful we are in these deliberations.

Mr. Chairman, I share your concern about the effect of deregulation on safety. Some adjustments are necessary, and I believe FAA is making them. But before I discuss what we at FAA are doing and plan to do about maintaining and improving safe air travel, I believe a frank assessment of deregulation and its effect on our Nation's civil aviation system is in order. At issue today is whether deregulation has contributed or detracted from air safety and whether we need some form of re-regulation.

In and of itself, economic deregulation of airlines achieved its purpose: supply was released to compete for demand, a greater supply increased competition which in turn reduced prices. But taken in the context of where the country was in the mid to late 1970's, many of deregulation's benefits were masked by other problems. In the mid-70's, high fuel prices, interest rates, and the recession dampened industry's ability to fund new capital improvements and expand operations.

When the recession ended, and fuel prices and interest rates came down, the pent-up energy of deregulation exploded. Suddenly, industry re-invested in airline growth. New carriers entered the market at a rapid pace, changing route structures with relative ease. Hub airports were created to cope with accelerated supply and increasing demand. Cheaper fares ruled the day, and regional air carriers grew up overnight. An entire new industry of express package delivery was born. Air commerce experienced a rapid rebirth. But unintended consequences of rapid growth also surfaced. In some ways, the country was caught off guard.

New concentration on hub routes increased air travel, tightened slack, and lessened the reserves of spare parts and planes, and rapid turnaround times at these hubs put great pressure on all operations and maintenance people. Passenger demand for peak hour travel created scheduling games by the airlines, unrealistically setting departures to capture market share rather than improve on-time performance.

Evolution of these hubs also meant a major shift in geographic location of demand for FAA surveillance and inspections. More inspectors were needed. Expanded entry also increased pressure on EPA to certify new carriers while maintaining adequate inspection staff to ensure public safety. An already hard-pressed inspection work force had to sacrifice surveillance to work on getting these new airlines in business. In the early years these challenges were not adequately met. However, this was recognized, and inspector staffing has increased considerably since 1984. And of course in 1981, we experienced the controller strike, greatly reducing the air traffic control system's capacity to handle demand.

On top of it all, in the mid 1980's, there was the introduction of major new aircraft types into the United States fleet like the Boeing 757 and 767 and a number of new makes of the Airbus A300/310 models. These aircraft represented quantum leaps in technology and automation and put additional demands on crew procedures, training, and maintenance programs. And we found that airline mergers affected management labor relations, often resulting in cockpit crews having to merge training procedures from two or more different corporate cultures. And finally, we found FAA trying to recover from the controller strike, rebuild its aviation inspector workforce, and handle increased demand with airports and air traffic equipment built in the 1950's.

What has been the effect on safety of these rapid changes in civil aviation? Can we tie economic deregulation to an erosion of safety margins in our air traffic control system? Statistics are one obvious measure, so let's examine the record from a statistical point of view.

Deregulation has resulted in a tremendous explosion in air travel—from 220 billion passengers miles in 1978 to more than 366 billion passenger miles in 1986 and projected 386 billion in 1987. And this proliferation in air commerce has occurred within the context of a steadily decreasing fatality rate. Taken together, from 1978 through 1986 the trend in the number of fatalities per billion passenger miles has steadily declined from 1.6 to near zero. The tragedy of the Northwest crash in Detroit changes the 1987 record, however. In this same time period the number of airlines has also risen from 39 to 100, the number of planes in service is up more than 20 percent, and the seats per plane have risen nearly 30 percent, the overall safety trend has continued dramatic improvement: 1.19 fatalities per billion in the 1972-79 period compared to an average 0.48 from 1979 to 1986. Even with better reporting and increases in the number of passenger miles flown, the number of near misses per passenger mile flown in 1986 was almost identical to the number in 1978, the year of deregulation.

But statistics alone can be misleading. The numbers of accidents and fatalities are so small that one cannot logically construct any statistically valid relationship between airline deregulation and the number of fatalities, near misses, or safe travel. Debates over numbers miss the heart of the issue. I do not think, however, the American people, Congress, and those of us in the aviation community should take any inordinate comfort in downward trends of operational errors (for example) than to take undue alarm in any short term increases in operational errors.

Mr. Chairman, deregulation may be more a victim of its own success than a cause of reduced safety. But clearly, the public is asking, "are the skies safe enough?" They aren't satisfied with yesterday's safe landing; they've worried about tomorrow's takeoff. What we face today is not a crisis of safety brought on by deregulation, but a crisis of public confidence.

Today's look inward is healthy, and we need more of it. It is precisely what I've done in the two months since I've been at the FAA. I recognize the important role the aviation subcommittees have played in focusing FAA's resources on its safety responsibilities in a deregulated environment, and I intend to maintain the inspection program and the firm enforcement policy you have supported over the past few years.

As the new Administrator, I've been able to ask some tough questions and look for some new answers. For example, I measure safety as exposure to risk, not absence of accidents, and I want FAA to develop better indices of safety so that the traveling public can be confident that the margin of safety has not eroded during this period of explosive growth. I've asked for renewed commitment to accelerate the modernization of our equipment, procedures, and people in the air traffic system, a program entitled Impact '88. I've laid out an ambitious agenda of change and new direction for FAA this fiscal year, designed to recapture public confidence in aviation and rebuild our aviation infrastructure. I believe that increased accountability is the type of self-regulatory step that aviation professionals must take to regain public trust.

My program starts with people. Too often, we focus on numbers—of controllers, pilots, technicians, maintenance inspectors—rather than on quality. I'm concerned, for example, about pilot and crew professionalism. When I called together the Nation's chief pilots last August for a face-to-face meeting in Kansas City, I asked for their commitment, as professionals, to maintain that razor edge vigilance every day;

to combat the routine and expect the unexpected. I'm concerned about pilots and crews landing at wrong runways, wrong airports, or dialing in the wrong navigational waypoints. It's that last landing of the day, clear skies, sun setting, that concerns me. We must increase our emphasis on the human factors—the ergonomics of flying, how pilots and crews work with machines and automation. Accordingly, I've asked for a much greater commitment to human factor research. We are conducting a top to bottom review of pilot training and working with industry to revise our pilot training regulations, the first major change in nearly 30 years. I want to make sure we are truly modern in how we train and certify our Nation's airline pilots.

I've also asked our controller workforce for renewed vigilance in our nation's control towers and enroute centers. I'm concerned about controller professionalism. I'm setting up regular meetings with the controller workforce. The first one will be in Atlanta at the end of the month to examine the human factors in our air traffic facilities and ways that FAA managers help or hinder controller performance.

We have enough controllers for every position, but I'm concerned about our benchstrength and reserves. To get out ahead of the aviation growth curve, we need more controllers in 1988 and much better ways to train them. In the Impact '88 program, we are pursuing new approaches to recruiting, hiring, and training controllers that should greatly reduce the time needed to bring them to full performance levels. I need your support, Mr. Chairman and members of this committee, to truly modernize how FAA hires, trains, and retains its controller workforce.

Likewise, we can't allow competitive pressures on airline carriers to erode the margin of safety needed to maintain and upgrade our air carrier fleets. I will continue to ensure that the needed numbers of aviation inspectors are available to meet new and changing industry requirements as air commerce grows. But I also want the chief executive officers of the Nation's airlines to feel personally accountable to their safety obligations as they do to their shareholders. Most claim they already are. If so, fine. I would like them to personally sign off on reports to FAA showing how they are complying with FAA airworthiness requirements. I believe it's a small price to pay on the part of our airline executives to prove to the traveling public that the service and delay problems passengers are experiencing at the gate have not carried over into safety in the air.

Mr. Chairman, I'll pledge to provide the quality professionals in our civil aviation system. I need your help to ensure we reach this goal.

Under my Impact '88 program, I've also called for acceleration of our modernization efforts under the NAS Plan. We must quicken the pace of replacing old hardware and move up the timetables for advanced technology. Toward this end, I've requested, and then Secretary Dole and now Acting Secretary Burnley have approved, a major increase in my authority to procure new equipment. The FAA authority to handle its own contracts was increased from $200,000 to $150,000,000. We've been able to develop a partnership to involve the OST at the beginning, but to turn responsibility over to us where it belongs. We are establishing in FAA the needed checks and balances. This delegation reflects the renewed commitment of both FAA and the Office of the Secretary to work together for aviation safety. I have every confidence that the positive partnership I started with Secretary Dole will be continued and strengthened under Jim Burnley, when he is confirmed by the Senate.

Mr. Chairman, we have a unique opportunity to work together to reap the enormous promise today's challenges hold. During my confirmation hearings, you asked me to tell you whenever I needed your help. I haven't forgotten your kind offer of assistance and plan to work closely with you to keep our civil aviation system the safest and most advanced in the world.

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., S.W.
Washington, D.C. 20591

NOV 20 1987

The Honorable Ernest F. Hollings
Chairman, Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This is in response to your October 16 letter which enclosed follow-up questions for the hearing record of my October 15 appearance before the Committee.

Enclosed you will find my responses to those questions. If I can be of further assistance, please let me know.

Sincerely,

Allan McArtor
T. Allan McArtor
Administrator

Enclosure

Question 1: Mr. McArtor, virtually once every day a jet airliner is involved in a near mid-air collision. What is the relationship between this problem and deregulation? If there is no relationship between the increased freedoms of airlines to schedule their flights and these near-misses, why has the problem continued to escalate?

ANSWER: We do not view the increase in pilot-reported Near Midair Collisions (NMAC) as a phenomenon of deregulation. The majority of the increase in pilot-reported NMAC's has involved nonhazardous NMAC reports, which are incidents in which the direction and altitude of the involved aircraft would have made a midair collision improbable regardless of evasive action. It is likely that much of the increase in reported NMAC's can be attributed to an increased emphasis on reporting and improved report accountability by the FAA as well as increased media attention. For example, our Back-to-Basics program initiated in 1986 stressed collision avoidance and the threat of midair collisions. In addition, the FAA has instituted an auditing program in all regions to ensure that we are receiving all NMAC reports in a timely fashion. Some of the increase may also be attributable to increased traffic. I can assure you, though, that we do take each NMAC report seriously; we investigate them all; and have a number of programs underway to reduce the threat of midair collisions.

Question 2: Given the fact that the number of airline operations have increased by 30 percent in the 10 years since deregulation, and the growing problems of near-misses, controller errors and pilot deviations, should there be restrictions on the number of flights into certain congested airports?

ANSWER: We currently have regulatory limits on the number of flights at four high density traffic airports. Although the FAA does not have any plans to expand these restrictions at this time, we are taking steps to reduce air traffic congestion at several of our busiest airports.

Last March, under antitrust immunity granted by the Department of Transportation, we held voluntary discussions with airlines to adjust summer schedules at Atlanta Hartsfield, Boston, Chicago O'Hare, Dallas/Fort Worth, Newark, and Philadelphia airports. Since that time, we have continued to meet individually with many of the major air carriers to discuss scheduling.

In addition, DOT has implemented regulations that require carriers to disclose on-time performance, and entered into agreements with six airlines regarding scheduling standards at four congested airports. We have noted that these actions by the Department have had a dramatic impact on carrier scheduling practices and have resulted in changes that have somewhat reduced peaking at hub airports. Additionally, operators of the automated reservation systems have agreed to eliminate elapsed flight time as a factor in computer reservation systems.

Another initiative implemented during the summer, the Sector Traffic Management Program (STMP), was designed and effectively administered to limit traffic in those sectors that were at or near capacity. STMP and other traffic flow management programs are used on a routine basis to ensure that only the traffic that can safely be accommodated is allowed into the air traffic control system.

ARSA's, expanded TCA's, and voluntary 4-hour advance filing of flight plans for non-scheduled operations above Flight Level 230 are also recent FAA actions dealing with airspace congestion.

We believe that current air traffic programs and procedures provide an adequate safety level, and we do not currently contemplate additional restrictions on the number of flights at any airports.

Question 3. The FAA recently expanded its requirements for general aviation aircraft to operate Mode C transponders at 23 Terminal Control airports. Should that requirement be extended to other airports--for example, where airlines provide commercial service?

ANSWER: The requirements for Mode C transponders are for all operations in TCA's, not just general aviation aircraft. The requirement existed in 9 Group I TCA's for many years. FAA published a new transponder rule in January of this year, which will be effective December 1, that requires aircraft to be equipped with Mode C transponders when operating in all TCA's, including the 14 Group II locations. The issue of expanding that requirement to other airports where airlines provide commercial services is under consideration.

We are also proposing to establish a 30-mile "buffer" zone from the surface to 12,500 feet around all primary TCA airports in which Mode C would be required.

Mode C transponders promote safety in two specific areas: (1) they provide an automatic display of aircraft altitude on a radar screen where there is air traffic control radar coverage; and (2) they can be detected by Traffic Alert Collision Avoidance Systems (TCAS), which we are proposing in rulemaking to be required aboard all commercial aircraft. That detection provides the TCAS-equipped aircraft instructions for collision avoidance if the target detected poses a threat to the aircraft.

Not all of the airports serviced by commercial airlines have radar coverage available to make use of the Mode C. Moreover, we do not yet have a fleet of TCAS-equipped aircraft that would benefit from the Mode C transponder. Accordingly, we are primarily focusing on requiring Mode C for operations at airports that do have radar services and are currently considering including such a proposal in our rulemaking proceedings.

Question 4. The FAA has been working on collision avoidance equipment (TCAS) for nearly two decades. When will you be ready to certify this equipment and how long will it take for installation? Should it be required on all commercial aircraft?

ANSWER: The current collision avoidance system has evolved through the development of the Aircraft Collision Avoidance System (ACAS) and the Beacon Collision Avoidance System (BCAS). They were found to be impractical but have contributed to the current system known as the traffic alert and collision avoidance system (TCAS).

A notice of proposed rulemaking was issued on August 26, 1987. Our current plan reflects that a final rule will be issued by the third quarter of 1988. The proposed rule would require the following equipment to be installed after the effective date of the final rule:

- TCAS-II within 3 years in air carrier aircraft carrying 30 or more passengers and operated under Part 121 of the Federal Aviation Regulations (FAR).
- TCAS-II within 4 years in air carrier aircraft carrying 20 to 29 passengers and operated under Part 135 of the FAR.
- TCAS-I within 5 years in air carrier aircraft carrying 10 to 19 passengers and operated under Part 135 of the FAR.

The FAA has already certified a prototype TCAS-II unit installed in a Piedmont Airlines Boeing 727. Two other certification programs are underway to place a small number of production units in United, Northwest, and Piedmont airplanes. Certification standards and procedures are in place for approving a fleet-wide installation of TCAS units. The actual certification of any TCAS installation is a function of the applicant's production and certification schedules and typically could take up to 18 months.

Question 5. Your safety inspectors continue to find airlines that have violated FAA operational and maintenance rules. What is needed to ensure that the airlines comply with these safety rules?

ANSWER: Two parallel efforts are needed to ensure that airlines comply with safety rules. First, the FAA needs to maintain systematic, methodical safety inspection programs. Second, industry needs to implement an effective, internal safety auditing system that involves and informs top company management.

Regarding the first effort, FAA has comprehensive, effective inspection programs ongoing. These programs are defined by National Program Guidelines, which specify a required routine surveillance plan, and by the National Aviation Safety Inspection Program, which implements the FAA's "white-glove" indepth inspection program. In conjunction with FAA's inspection programs, a fair and judicious enforcement policy is required to correct any ingrained management attitudes that disregard safety regulations. We also must continue our efforts to attain adequate numbers of inspectors to fully implement our safety inspection programs. The FAA has taken significant steps and has been successful in increasing safety inspector staffing levels over the past several years (a 57% increase since 1983). Inspector staffing must be proportionately matched with the size of the industry. When full staffing is attained, FAA's safety inspection program should be able to attain the optimal impact on regulatory compliance.

Regarding the second effort, an FAA initiative to require airlines to conduct internal safety audits is underway in conjunction with "Impact 88." We intend to provide criteria and methods for these audits, which will keep top management informed concerning a variety of safety parameters.

Question 6. Does the fact that airlines continue to violate these rules lead you to believe that the approach of self-compliance by the airlines does not work in a deregulated environment? If not, why?

ANSWER: Compliance with safety requirements is a statutory responsibility of the airlines, and it must work if we are to maintain a safe air transportation system. It is simply not feasible for the FAA to monitor or inspect every facet of an airline's operations on a continuing basis. Our inspection programs indicate that the vast majority of airlines do operate in general compliance with safety regulations. These airlines welcome FAA's help in self-policing efforts designed to find aberrations in operational systems which lead to safety violations. FAA provides this assistance through its inspection programs and through initiatives such as "Impact 88," which, as previously noted, will provide guidelines for industry-conducted, internal safety audits. For those few airlines which are incapable of meeting or unwilling to meet their statutory responsibility regarding safety, FAA's inspection and enforcement programs are designed to identify them and to impose substantial penalties to gain compliance. In the most serious cases, FAA can take action to suspend or revoke a carrier's certificate.

Question 7. You also stated that you want the support of Congress in hiring, training, and retaining new controllers. What do you have in mind?

ANSWER: With regard to my plans to revise the current approach to hiring, training, and retaining controllers, I am seeking the support of Congress in two respects: first, to recognize that major changes such as I envision cannot be accomplished overnight--it takes time to ensure that we are effecting the right changes in the right way; and second, to provide funding or legislative relief if such needs are identified by the FAA. I would like to briefly highlight the kinds of changes I am seeking.

One of my primary concerns is to streamline the hiring process for new air traffic controllers, to increase the pool of applicants, and shorten the time it takes to process applicants for employment. We have already contacted the Office of Personnel Management and the Federal Bureau of Investigations to explore limited delegations of authority to the FAA. We are assessing the benefits of assuming partial delegation to test and score air traffic controller tests in order to provide immediate feedback to test takers.

Those who score in the upper percentile of those tested could be placed in a "fast track" to expedite the security, medical examination, drug screening, and interview for placement in the air traffic occupation. We expect this approach could significantly shorten the 6-to 18-month processing time that is currently required.

We are now in the process of conducting a study of our air traffic control training programs. These studies will focus primarily on the initial screening and training of terminal and center developmental air traffic controllers at the FAA Academy and field facilities. A secondary focus will be on refresher training for full-performance-level controllers.

Since there is a need to accelerate the progression of air traffic controllers to the full-performance level, the objective of the study is to develop short-and long-range plans for using advanced training technologies such as computerized control tower simulators. This would allow us to reduce training time, improve retention and performance, and improve the use of student and instructor resources.

With respect to retention of controllers, we are currently exploring avenues that could make remaining in selected geographical areas more attractive. It may require legislation to put these incentives in place.

Question 8. Increasingly, this Committee is hearing from air traffic controllers, pilots, and mechanics that when they see safety problems in the system, they are afraid to report them for fear of reprisal -- whether it be from FAA or airline management. Do we need to provide protections for these individuals to ensure that safety problems are reported and subsequently corrected?

ANSWER: With respect to controllers or other FAA employees, I will not tolerate reprisal for reporting safety violations. In fact, I expect FAA employees to report such safety violations, and we have a variety of avenues available for them to do so. FAA controllers, for example, may file unsatisfactory condition reports within their facility noting any deficiencies they have found. FAA employees as well as employees in the airline industry may also use the Aviation Safety Reporting System, administered by NASA, in which anonymity is guaranteed persons who report safety violations. There is also available to them the FAA's Safety Hotline, which will provide anonymity to callers if they so elect. Further, we will seek to protect the identity of any airline employee who provides safety information to us, to the extent that our investigation can be conducted without indicating who supplied the information. I believe that ample protections already exist for FAA employees. With respect to airline employees, should it prove that existing reporting avenues do not facilitate reporting of safety information, consideration of other means of providing protection may be warranted.

Question 9. NTSB Chairman Burnett and others have expressed concern that the pressures of competition at hub airports are forcing the airlines to turn around planes too quickly. What are you doing to ensure that all required safety checks are being performed before flights out of hubs?

ANSWER: This issue is one which needs a continued emphasis by the FAA. The FAA has increased the geographic surveillance of hub and spoke operations to assure that required maintenance is accomplished. Additionally, FAA initiated a minimum equipment list (MEL) survey of 11 airlines to assess the impact of the hub and spoke operations on MEL abuse. This survey should help us identify the extent to which maintenance items are being deferred due to hub and spoke scheduling. Analysis of the survey results is currently underway.

Question 10. You have stated that you intend to develop new safety indicators so that the public can be confident that the margin of safety has not eroded. Are the current statistics on near-misses, controller errors, and pilot deviations--which the FAA collects--inadequate?

ANSWER: While these three indices are important to the FAA's safety analyses, I am concerned that current statistics on near-misses, controller errors, and pilot deviations may not provide an accurate overall index of aviation safety, in part because of biases to which they are subject. For example, any near midair collision reports received by the FAA are of necessity based on very subjective information regarding how close the involved aircraft approached each other. In most situations, the FAA has no independent means of verifying the information provided by the pilots filing reports.

The pilot deviation data base is also subject to potential bias resulting from the intensity or special emphasis of FAA enforcement practices. For example, since the Cerritos accident, the agency has placed increased emphasis on the documentation and enforcement of TCA violations. The increased number of such infractions now contained in the data base presumably reflects this added emphasis rather than a significant change in pilot practices vis-a-vis TCA airspace.

Of the three data bases, the operational error data base is the least subject to extraneous factors. It is nevertheless subject to some distortion. A controller may not be aware that a violation of minimum vertical distances between aircraft may have occurred if one of the aircraft lacked a Mode C transponder and the pilot did not report his true altitude. The FAA has recently promulgated a rule which will require Mode C transponders in all TCA's by December 1, 1987.

These problems notwithstanding, the FAA believes that these data bases can serve as useful indicators of where agency efforts and resources should be focused. They will certainly be a major part of any overall index of aviation safety that may be developed. In addition, the agency is exploring the usefulness of incorporating other measures such as Service Difficulty Reports, inspection results, and enforcement actions in such an overall index of safety factors.

Question 11. Later today, several witnesses will discuss how, since deregulation, the level of pilot experience has dropped. What is the FAA doing to ensure tnat pilots have the experience needed to fly a fully-loaded airliner?

ANSWER: As part of "Impact 88," this issue is being addressed through a government/industry task force that will thoroughly review pilot training and checking standards, human factors issues, simulation, and the overall impact on crew performance of cockpit automation, standardization, and the environment. Out of this effort, major changes to current standards are expected that should more than answer concerns related to pilot experience levels. It should be noted that it is extremely difficult to define a minimum experience level in terms of flight time or years that will ensure a desired level of competency for all individuals. Safety in the cockpit ultimately comes from the relationship between training and human factors which are the emphasis areas for the joint task force.

Question 12. Increasingly, especially as pilot experience levels decline, human error is a factor in airline accidents. You have discussed this as one area in which you hope to make a mark. How has the FAA responded to the need to ensure that flight crews are being integrated after airline mergers and that training is being adequately conducted?

ANSWER: The integration of separate work forces in a merger is a concern to the FAA. To address this issue, the surviving carrier in a merger situation is required to submit a comprehensive transition plan to the FAA for approval. This plan must contain specific training programs for the integration of crewmembers and provide assurances that all regulatory requirements will be met. Once the plan is agreed to, special surveillance by the FAA is used to ensure compliance. Although each merger situation is different, the FAA believes that this program has been effective to date, and we will continue to exercise this method of oversight to assure crew integration is appropriately achieved in a safe manner.

NOV 20 1987

The Honorable Pete Wilson
United States Senate
Washington, DC 20510

Dear Senator Wilson:

This is in response to your October 13 letter to Chairman Hollings which enclosed follow-up questions for the hearing record of my October 15 appearance before the Committee on Commerce, Science, and Transportation.

Enclosed you will find my responses to those questions. If I can be of further assistance, please let me know.

Sincerely,

(signed) Allan McArtor

T. Allan McArtor
Administrator

Enclosure

Question 1. Has the FAA examined the effects of the emergency Terminal Control Area rule governing the Los Angeles International Airport on general aviation traffic, especially with regard to the new flight patterns to be used by pilots who either do not have Mode C transponders or who are denied entry into the LAX TCA due to traffic considerations?

ANSWER: The FAA has closely monitored the traffic flows in and around the Los Angeles TCA since implementation of SFAR 51, which altered the TCA. This ongoing analysis generated several changes in the manner in which air traffic control responds to and services requests to transit the TCA. Much of the traffic, which either cannot be accommodated in the TCA or elects not to request ATC service, is transiting along published visual flight rules flyways or circumnavigating the eastern-most boundaries of TCA airspace.

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Question 2. If the FAA has examined such effects and foresees possible air traffic problems outside of the TCA due to the ruling, has there been any consideration to re-opening the VFR corridor directly above LAX? Would such a VFR corridor mitigate such problems?

ANSWER: The decision to close the corridor followed a near midair collision which occurred in airspace directly above the ceiling of the TCA. The SFAR's initial emphasis was to raise the TCA ceiling to 12,500 feet MSL, recognizing the immediate need to eliminate the mix of controlled and uncontrolled flights in that airspace. However, it was also recognized that, by raising the ceiling, traffic normally transiting in that specific airspace would attempt to operate in the VFR corridor. Because there was insufficient data to assess the safety consequences of increased traffic volumes in the VFR corridor, a decision was made to close the corridor pending further safety analyses and receipt of public comments. However, consideration will continue to be given to re-establishing a VFR corridor, based on comments received in the public docket and experience with operation under the revised TCA configuration. The comment period on this rulemaking closes on December 9, 1987.

The FAA is also developing alternative methods for accommodating transit by VFR traffic in a manner which affords control of that traffic and its integration with existing TCA operations. We expect that establishing routes for VFR flights transiting the TCA will mitigate the concerns about the closure of the corridor.

Question 3. Given that the emergency ruling was caused by the FAA admitting that it could not provide positive control for aircraft using the TCA, when will the FAA be prepared to handle the growing traffic in the Los Angeles area in terms of equipment and personnel?

ANSWER: We recently initiated a two year program specifically designed to meet traffic demands in the Los Angeles terminal area. This plan provides for additional equipment, controller and support personnel, system upgrades and airspace realignments. When complete, we anticipate these initiatives, along with others of a national scope which are in various stages of development or implementation, will enable the ATC system to meet existing and future needs of the highly congested Los Angeles area.

The CHAIRMAN. Next we have the Honorable James E. Burnett, Chairman of the National Transportation Safety Board.

I understand that you do not have a prepared statement, but we would be delighted to hear from you at this time. You are the gentleman, you remember, that attested to the fact that we needed more flight restrictions in the air traffic control system earlier this year.

Do we have enough capacity now? Tell us what you think about this whole problem.

STATEMENT OF HON. JAMES E. BURNETT, CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD

Mr. BURNETT. First, Mr. Chairman, although I do not have a written prepared statement, I would like to say a few words, and then respond to your questions.

I think in considering the relationship between aviation safety and economic regulation and economic issues, we need to keep in mind that during the period of deregulation, we have had a dramatic and undeniable improvement overall in aviation safety.

Now, that can be illustrated by the fact that the accident rates for major carrier aviation, Part 21 type aviation, have basically been cut in half, if you compare 1984, 1985 and 1986 data with, say, 1976, 1977 and 1978.

And for the commuter industry, those rates have been basically cut in a third by most measures.

To say that we have had this kind of dramatic increase in aviation safety during that time period is not to say that that is due to deregulation.

We have had, of course, tremendous technological advances that have been incorporated into our Nation's air transportation system, in the period of that decade.

The one thing we can say is that, apparently, deregulation has not stunted some of those trends that have produced increased safety.

But to say all of this is not to say that there are not some economically based threats to the safety of our air transportation system. And I would like to list those very briefly before responding to questions.

The first of those, and most obvious, I think, and the one that is most critical right now, has to do with the air traffic control system.

We have at peak times, and especially during the summer, demands being placed on our air traffic control system that exceed its ability to respond to them.

And that means that in some way the number of planes being serviced by the system have to be tailored by its capacity. And unfortunately, the way we have had of doing that has been to wait in line on the tarmac, which is unsatisfactory to those of us who travel, and produces a great deal of pressure on the FAA when they have a situation of conflict between the efficiency of the system and the safety of the system.

And in that situation, safety sometimes loses. The FAA did take some steps in response to our recommendations during the summer that somewhat improved what we were seeing in terms of operational errors and runway incursions and those types of things, and we were pleased to see that.

But we have just completed a very high risk summer in that regard. And I think we very much need to look at improved or more satisfactory ways of allocating the capacity in the system in ways that do not build pressure to allow more activity in the system than it can safely handle.

The second issue in which economic regulation can threaten safety is with the maintenance system, which has been discussed, I think, a great deal; sometimes I have said perhaps too much. In the sense that—is that some signal for me?

The **Chairman**. No, go right ahead.

Mr. **Burnett**. I think there has been a great deal of concern that in the deregulated environment, because of the pressures of competition, we might have corner-cutting, or that because of the pressures of the hub operating system in which there is very little turn-around time, if things work the way they are supposed to work, for maintenance, at many of the airports, there would be pressures on maintenance personnel not to do the kinds of maintenance that needs to be done; and that there would be a derogation in aircraft maintenance due to that.

Now, frankly, I think we see very little evidence of that at this time. You cannot make a good case that that has happened, although there are a lot of people who are concerned that it may happen, and certainly, I think everybody recognizes that the pressures are there.

And therefore, it is incumbent on the FAA to maintain a very high level of vigilance to see that that does not take place.

The third issue, and one that has probably not really impacted us yet, but may be the most significant of the three when it does, is the fact that we have, because in the deregulated environment we have had such a tremendous increase in the demand for aviation services, that that translates into a great increase in the demand for pilots.

And the traditional source of experienced pilots to go into the air carrier industry has been in the military, and that source is not now adequate to supply the pilots that are being demanded by the industry.

We have already seen for the commuter industry that they have gotten into a crisis situation in trying to find the pilots, and sometimes have had to cut their standards in order to provide pilots for their industry.

And we have the potential that that is going to happen at some point in the air carrier industry. Certainly, we see already some lessening of experience levels in terms of air carrier pilots, and this could get much worse.

Now, none of us knows really what the impact of that is going to be, because it is not clear what kind of impact a less experienced pilot has.

But I think, at least I am one who doesn't really want to see the answer to that question, because I am afraid of the answer to it.

So I think we will have to examine that carefully. And I have no assurance that we have a regulatory position in place, a program in place, that can keep that situation from swarming on us at some time in the future.

And that is a matter, I think, of great concern, and I think we need to be looking at ways in which we can upgrade the kind of regulatory requirements on airlines for pilot training, and maybe some of these economic savings that are being enjoyed as a result of deregulation need to be plowed back into enhanced pilot training.

That is a summary of my views. And, although I do not think my fellow members would necessarily disagree with me, those are my views; they are not official positions of the Safety Board, although some of them certainly arise from the work that the board has done.

The CHAIRMAN. Well, very good. You started off, of course, and I discerned that from the major witnesses, that I do not expect you to panic the public, but they all come and say we are safer now than we were before.

And of course, none of us really believe that. If it is all that logical, in that we have only 13,000 controllers today and we have increased air traffic levels by 30 percent since 1978, then the logic would demand another 3,000 controllers so that we can get more safe.

What gives? Then, you finally came back around. I do not know why we put on this charade and say, yes, we are short of controllers.

Do you not think we are short of controllers?

Mr. BURNETT. Oh, yes, I do.

The CHAIRMAN. Approximately how many, and how do you think we should go about——

Mr. BURNETT. Well, I do not have any way of making that determination. I would be talking through my hat if I tried, and I do not think the committee wants me to do that.

But I do think we are short of controllers, and I think the air traffic control area is the one area where we have had some serious negative trends.

We at the Safety Board have been very concerned about what we have seen happening this year in terms of the safety indicators as far as the air traffic control system.

Now, in most other areas of aviation safety in fact we have seen substantial progress over the past few years.

So it is not a situation—I think it is not—I want to be sure that we do not think that there is a charade about the fact that aviation safety has improved over the last decade; it has, very clearly so.

But nevertheless, we have a very disturbing trend as to the safety of the air traffic control system, and the threat of midair collisions is one of the things we have to be concerned about.

The CHAIRMAN. Well, with respect, then, to the turn-around time. You say there is but little evidence that it is happening, but we are seeing many news articles. I guess you saw the *New York Times* on Monday. There was a business page article dealing with nothing but that; quotes from those in positions to know that the hub system has brought such a chaotic situation that you do not have sufficient time for the flight crews to check out the equipment, the maintenance—or ground crews to check out the maintenance.

Mr. BURNETT. Well, I think there is a lot of concern about that. We have not seen it in the accident and incident investigation process, in a convincing way.

But I definitely think it is a matter of concern, and that is the reason I cited it, and I think we need to be watching it very carefully.

The CHAIRMAN. Well, what do we do about it, as far as you—what would you recommend?

Mr. BURNETT. The FAA has a plan to improve their surveillance program. I think in the area of maintenance, we have an adequate regulatory regime. But we have probably an inadequate surveillance establishment right now.

Now, the FAA has a plan that was developed after we cited the real problems they had in surveillance, after we went into deregulation.

And at the same time we deregulated, we also reduced the surveillance capacity of the FAA, which is something that should not have happened.

And they have added inspectors now, and they have developed a better plan for doing their inspections, although that is not fully in place yet.

And the one remaining concern I have is that we do not really have a way of making the airline as an institution as accountable as I think they should be for the quality of their maintenance program.

I have been very pleased to hear the FAA Administrator mention in some of his public statements the fact that you have to be holding the CEOs and the board members responsible for this.

I think there has been a tendency on the part of the FAA to hold the maintenance man responsible. It is sort of a trickle up theory, that somehow that is going to work its way up to the board room.

So I hope that he is able to follow through on his idea that we need to put more accountability at the top levels of aviation management.

The CHAIRMAN. But we do need more inspectors? Well, we at least have found that out now with respect to that pilot training.

You attested to the fact that we have no regulatory position in place. Should that be at the FAA level, or your level, or a separate entity within the Department of Transportation?

What is your suggestion?

Mr. BURNETT. Well, I think that is definitely the responsibility of the FAA. And the FAA currently has some regulations for levels of pilot experience and levels of training.

The fact is, however, the way that the airlines have traditionally operated, they have operated far beyond the FAA regulatory floor.

And if they come down to the regulatory floor, in many respects then I think we will probably have a derogation of safety as a result of that.

So we need to be looking in that case perhaps at some improved and more stringent regulations. And the problem with that is, no one quite knows what those should be. And I do not have any answers for it. I do not think the FAA has.

But we have got to take, in short order, some steps to be sure that we do not have some derogation of pilot proficiency as a result of less experienced pilots.

We are now incorporating all the glass cockpits. We are going to have the TCAS system eventually in the airplanes. All of these bells and whistles that we all advocate may, at some point, actually increase the task of the pilot; in fact are increasing the tasks of the pilot and making it more complex.

If you combine that trend with a trend toward a less experienced pilot, and pilots who have had, especially because they have been trained in the civil aviation environment rather than the military environment, a less challenging type of experience in many ways, we may, in fact, at some point have it boomerang on us.

And I do not see that we—I think we are behind the curve on that.

The CHAIRMAN. Well, that bothers me. How do we have—and then I will yield—how do we have in place, or how should we put in place more stringent regulations?

I am certain you would not want a bill through Congress. That ought to come out of the FAA itself, should it not?

Mr. BURNETT. That is a problem. If you try to do that legislatively, it would be too rigid a system.

The CHAIRMAN. Right.

Mr. BURNETT. And the FAA is the one that is going to have to do that. I would certainly hope that this committee in its oversight functions of the FAA would put high priority on getting them to tackle that issue.

The CHAIRMAN. Very good. Thank you.

Senator Ford?

Senator FORD. Let me follow up on Chairman Hollings' question.

Of course you say that the standards have been reduced, yet they have not been reduced below the minimums required by FAA.

Yet, with the standards being reduced, and the problems that you say are inherent with this reduction of efficiency by the pilots, we have reduced accidents with commuters by a third, and major aircrafts by 50.

It is almost like the decline of the dollar and imports keep going up. It is kind of hard for me to figure that, Mr. Burnett.

Mr. BURNETT. We need to look at the time frame that we are talking about.

We are looking over a decade, basically. And I think what we are experiencing, as far as the demand for pilots potentially exceeding the ready availability of them, something that has basically taken place since the last recession.

So that is only on a fraction of that. And I do not think we have really reached at this point the crisis that I think a lot of people can foresee coming, if we continue to have the kind of growth in the demand for aviation services that we are experiencing.

Now, that may reverse itself. For instance, the economic cycle may take care of the problem, or at least postpone it for us. But nevertheless, it is something that we cannot ignore on the horizon.

Senator FORD. We always depend on something else to take care of it for us, like the economics of rising interest rates; they will not be able to buy new aircraft, or will not be able to expand.

How much of a problem in the air transportation system have the mergers been?

Mr. BURNETT. Well, the insight that we get on that from the accident and incident investigation end is, that a merger requires the merging of operational practices.

And we have seen in the past waves of mergers—I do not know that we have seen it in this latest wave of mergers—but if you go back for instance to the organization of, say, Republic Airlines. And a few years ago, I believe it was maybe in 1982 and 1983, we saw a lot of fairly serious incidents on Republic, for instance, having to execute an emergency landing with virtually no fuel left.

And a lot of that came from the failure to properly integrate the operational procedures of the airlines that had been formed, had been put together to form Republic.

So that is the kind of thing that we are going to have to be very vigilant about in this latest wave of mergers. And I think it is incumbent upon the FAA to look very closely at operational procedures and how they are handling those mergers.

Of course another issue is that when you have the merger situation, you have people going into a different labor management environment. And it produces sometimes conflicts, different contracts between people who are now working for the same company; different wage rates.

And of course that has morale factors, and it also builds resentment, and you have to look at how it affects your maintenance program and your cabin safety program as far as the flight attendants and other issues.

So those mergers do present significant safety issues.

Senator FORD. Now, I have understood, and I think the last time you were here, we talked about the two pilots, pilot and copilot, one wearing the uniform of the parent company, one wearing the uniform of the one that was merged, and that does not help anybody up front when you know that those two mindsets are still with their other company, and the one with the parent company.

Mr. BURNETT. And when they change equipment. When you have someone who has been used exclusively to one type of aircraft, and because this new merged entity now has a different type of aircraft, and you have training problems, all of that has to be looked at and examined very closely.

Senator FORD. Well, it seems to me that the Department of Justice—I am not sure I want to revisit my bill a little bit—that those mergers that the Department of Justice were against the Department of Transportation approved, and those that the Department of Justice was for, they disapproved.

So I think probably the two best airlines to merge here recently has just been disapproved. So there is something out there that bothers me a little bit.

Maybe the consumer impact was involved here more than we realized up to this point. Would you have any comment on that?

Mr. BURNETT. As far as I know, that evaluation process by both Justice and Transportation probably takes place with very little attention to the safety impact that is involved.

It is an economic question.

Senator FORD. Economic question, and safety and all that is not——

Mr. BURNETT. As far as I know, safety is not considered. If it is, it would be news to me.

Senator FORD. Let me ask you this question. I see my caution light is on; I will try not to go beyond my time limit here.

Are we still running on red?

Mr. BURNETT. As far as the air traffic control system, when I said in this committee room a few months ago that we were running up to the red line? Well, because of the decrease in demand for services within the system, because it is now fall and this is not the time of peak demand—to give you an example, I keep an index of the near-midair collisions involving air carriers that are reported to be within 500 feet.

And they have been running most of the year one a day, and they got up to about two a day in late July; and this month so far, it is one every other day.

So the risk, I think, of a midair collision has been reduced. But I think it was very high for the summer, and I congratulate the FAA and the airlines on avoiding a catastrophe, but it was an uncomfortable situation in my view.

Senator **FORD**. Well, are we still running on the red line?

Mr. **BURNETT**. Primarily because of the seasonal change, we are not right now.

Senator **FORD**. Mr. Burnett, did you ever answer a question yes or no?

Mr. **BURNETT**. Well, I do not think there is a simplistic answer to that question, sir.

Senator **FORD**. Well, but you know, you just said we are not running on red because. That is like Truman wanted a one-arm economist, you know.

Mr. **BURNETT**. Well, if I tried to answer yes or no, it would be a simplistic answer, but the answer right now would be no.

Senator **FORD**. We are not running on red?

Mr. **BURNETT**. But that does not mean we will not be again Christmastime.

Senator **FORD**. Okay.

The **CHAIRMAN**. You do not want to be shoved like that, Mr. Burnett. What you are then saying is, a near miss every other day is tiptop; that is fine. And I know you do not want to testify to that.

Mr. **BURNETT**. Well, I am not satisfied at all with that.

The **CHAIRMAN**. So the answer is yes; we are still at that red line. I want you to know that your appearance today is appreciated. This committee particularly appreciates you keeping all of us, the Administration, the Congress, and all of us very, very aware of safety. Your work, and your visibility in this particular regard has been appreciated very, very much.

Mr. **BURNETT**. Thank you, sir.

The **CHAIRMAN**. We will get you back some more. But remember, we are still running up against a red line with every other day near misses; that is still too much.

Mr. **BURNETT**. I agree, sir.

The **CHAIRMAN**. Yes, sir. Thank you a lot.

[The following information was subsequently received for the record:]

Questions for the Record by
Senator Ernest F. Hollings

Flight Levels

1. **Question**: Mr. Burnett, in your view, has the air traffic control system grown during deregulation to the point where the FAA can safely handle unlimited numbers of flights at any point and at any time?

Response: No. In fact, the air traffic control system, if measured only in terms of controller workforce numbers and experience level, is still recovering from the effects of the PATCO walkout in August 1981. The controller staff, aided by continuing hardware and software enhancements during the rebuilding period has done a remarkable job in handling the ATC system demand. With the exception of traffic limitations imposed at four major high density airports and a limited flow control program, access to the system has been unrestricted since 1984. However, the increase in the number of operational errors which resulted in near collisions and runway incursions earlier this year prompted our concern that the traffic had reached a level where the system was being overtaxed.

The number and experience level of the controller workforce is only one factor in the determination of traffic limits. There is, of course, a physical limit to the number of airplanes that can be moved through a given volume of airspace or operated to and from a given airport within a fixed time period while maintaining prescribed safe separation distances and an orderly flow. The safe traffic flow rate is affected by the geographical characteristics of the airspace, the direction and convergence of airways, the existence of hazardous weather, the congestion of radio communication frequencies and so on.

Even with a fully staffed and highly qualified ATC controller force, the traffic levels in the system will always have to be modulated so that a margin of safety from these physical limits can be maintained with a manageable controller workload. The FAA attempts to accomplish this through their flow control program.

2. **Question**: Earlier this summer, the Safety Board called for restrictions on the number of flights because of congestion in certain airspace sectors in the air traffic control system. Should we restrict flights at congested airports to reflect current system capacity, as well as air traffic controller staffing and experience levels?

Response: During the investigations of the circumstances of operational errors last spring, our staff visited tower, TRACON and ARTCC facilities. Several controllers expressed concern that traffic situations were becoming too busy and complex in certain airspace at some periods of the day. This convinced us that the FAA's flow control programs were not totally effective.

At that time, the FAA Central Flow Control Facility was monitoring and limiting the traffic projected to arrive at certain key airports to assure that the traffic flow would remain consistent with the acceptance rates established for those airports, giving consideration for weather and runway configuration. The Central Flow Control Facility did not have any means of predicting the numbers of airplanes that would intermix in the enroute or terminal airspace ATC sectors as they proceeded to and from different airports. The individual controllers, along with facility traffic management specialists, were responsible for maintaining their own safe limits. In actuality, without a predictive program, the traffic could build rapidly and the controllers could get overwhelmed before they realized a need to ask for help or take other action. Often the only action possible was to refuse to accept traffic from adjacent facilities or sectors; not a good solution since the problem would then shift to that sector.

The enroute flow control was reactive rather than proactive. We believed that until FAA developed an effective enroute flow control program a reduction in airport acceptance rate should be used as an indirect means of limiting the traffic in the critical enroute and terminal airspace. We recognized that such action would have the adverse effect of increasing peak period flight delays; that it would be more efficient to implement a program wherein flights could be rerouted or more optimally scheduled to level the peaks and valleys of traffic through critical sectors.

3. **Question**: You had called for these restrictions as a short-term means of ensuring safety -- until the FAA had the computer capable of predicting when and where problems would occur. That equipment was due to be delivered last month. When is it now scheduled for delivery? Is there a safety problem in the air traffic control system until that equipment is available?

Response: Last May, about the time that we issued those safety recommendations, FAA's Central Flow Control Facility brought a new computer and program on line. The Aircraft Situation Display (ASD) brought them the capability to view the entire conterminous U.S. ATC airspace wherein controlled traffic could be observed on a real-time basis. Although the full capability and use of the ASD is not yet developed, it has proved to be an effective tool for some analysis and it has been used to monitor some of the sectors identified as critical by controllers. In some cases, where the daily problems were predictable because of airline flight scheduling and routing, actions can be and are taken to provide some relief. Both we and the FAA recognize that the effectiveness of the ASD remains limited until the capability is developed to predict, in real time, traffic flow through enroute centers and terminal airspace far enough in advance to hold or reroute flights in order to prevent system overload.

This program, called Monitor Alert, was originally scheduled for implementation in September 1987, but we were informed by the FAA that it has been delayed until at least June 1988. The FAA attributed this delay to hardware procurement. We certainly believe that a safety problem could develop as traffic levels in the system continue to rise as they probably will during the next summer season if the FAA does not keep pace with an improved flow control capability.

Deferred Maintenance

4 and 5. **Question:** It appears that under deregulation, FAA standards have become minimums. No longer do all carriers willingly exceed them. Do we need to increase these minimum safety standards to ensure that travelers have an adequate margin of safety?

You stated that some NTSB accident investigators are concerned about the extent to which deferred maintenance could be a factor in accidents. How great of a problem is deferred maintenance? How can we ensure that the airlines do not cut corners on maintenance spending in a deregulated environment?

Response: The Board agrees that the margin between the minimum established by federal aviation regulations and the actual level at which some carriers are operating has diminished since deregulation. Specifically, the experience level of the pilots has decreased due to the rapid expansion of airline operations. Although the carriers are still providing the level of training required by the regulations, the skill levels may be less than they used to be by virtue of the lower experience.

Regarding deferred maintenance items, the airlines have always been allowed to defer certain items; however, there does seem to be a trend for more items being carried as deferred for longer periods of time before being corrected. Of course, these types of maintenance items are not considered critical for flight, or they would be placed on the airplane's minimum equipment list. However, operations with numerous deferring "non-critical" items effectively reduces the level of redundancy built into the airline safety equation. Such redundancy has been a reason for the admirable safety record of U.S. airlines in the past.

Another alarming factor pertains to the considerable number of violations of federal regulations that are found during special FAA inspections. These enhanced inspections are routinely resulting in significant fines for certain airlines. However, these findings indicate a lack of initiative on the part of the airlines to comply with the intent of the regulations, and the inability of the FAA to detect and correct such deficiencies during routine surveillance. As you know, the intent of regulations are to ensure a safe operation. It has been the position of the Safety Board over the past several years that only through thorough routine FAA oversight can compliance with the regulations by the airlines be verified.

Safety Indicators

6. **Question:** Since deregulation we have relied on accidents and deaths as an indication of aviation safety. Some argue that by the time an accident occurs, it is too late and that we need to know whether the "margin of safety" is shrinking. Are near-misses, controller errors, and pilot deviations adequate for doing this? What other safety indicators are appropriate in a deregulated industry?

Response: Deregulation has certainly contributed to the increases in traffic and the heavier demands placed upon the ATC system. We believe that operational errors as they result in near midair collisions and runway incursions are one indicator of safety -- the ability of the ATC system to accommodate the increasing demand. Near midair collision reports and pilot deviations are other indicators, but since they often involve aircraft operating under visual flight rules they are not always a direct measure of the ATC system. Nonetheless, the number of near midair collisions, whether involving airplanes operating within the ATC system or not, is of major concern. Future enhancements to the ATC system which will permit controllers to detect pending conflict between IFR and VFR aircraft and independent airborne collision avoidance systems are urgently needed.

The other aspect of deregulation is the increasing competition and consequent economic pressures put on the airlines and commercial operators. The Federal Aviation Regulations require operators to file Mechanical Reliability Reports and Mechanical Interruption Summary Reports for certain circumstances related to equipment failures and malfunctions. We would certainly be concerned about increased frequency of such reports. We would also be concerned about increases in open maintenance items and more frequent operation of aircraft with equipment outages irrespective of the regulatory minimum equipment list provisions. We believe the FAA must exercise vigilant oversight of operational and maintenance practices.

Flight Crew Training

7. **Question**: You stated that because of the nature of recent accidents, you are concerned with flight crew training and integration. Have the airlines and the FAA done their job of ensuring the integration of flight crews after recent mergers? Should there be particular attention focused on these carriers to ensure that they operate according to FAA standards?

Response: We are certainly concerned about the possibility of a lack of standardization between flightcrews and airplanes following a merger. Some of the issues of integrating the flight crews are more management-labor related -- that is, establishment of common seniority lists and revised crew scheduling and so on. The FAA probably has little impact here. However, we believe that the turmoil caused by changes in domiciles and requalification in different equipment can affect crew performance. The lack of standardization is a more direct problem that has to be addressed by training.

We do believe that the FAA has to be aware of the need for special attention to crew and maintenance training when procedures and equipment changes follow a merger.

Reporting Immunity

8. **Question**: You have discussed your concern with pressure on airline employees to meet airline schedules. Should we have a system that protects these people from these economic pressures when they identify safety problems which could threaten the safety of a flight?

Response: We know that the public expects and deserves on-time performance from the carriers and the carriers economic survivability depends on this. It undoubtedly can create pressures on maintenance and flight crew personnel to meet schedules by accepting less than perfect equipment or operating conditions. An effective system to arbitrate the subjective judgments of employees and managers regarding decisions related to safety might be difficult to administer. We believe that the problem has to be addressed by realistic flight scheduling and aggressive oversight by the FAA. For example, operators who repeatedly dispatch airplanes with long-term maintenance discrepancies should be identified. Furthermore, we believe that the public should be aware of the hazards of bad weather and must be tolerant of weather-induced delays.

The CHAIRMAN. The next witness is Mr. Herbert R. McLure, Associate Director of the General Accounting Office.

STATEMENT OF HERBERT R. McLURE, ASSOCIATE DIRECTOR, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY CHARLES COTTON; AND JAMES NOEL

Mr. McLURE. Thank you, Mr. Chairman.

Senator Ford already introduced me. I am the guy that was wrong.

Senator FORD. I said what now?

Mr. McLURE. I said that you already introduced me.

Senator FORD. No, I said that you were wrong.

Mr. McLURE. Right.

Senator FORD. Yeah, you are right.

Do not knock being honest, you know.

The CHAIRMAN. You just witnessed to me, you are the most honest witness we have had up here.

Mr. McLURE. I would like to introduce Charles Cotton, who has managed a great deal of the work that has been discussed this morning already.

And James Noel is doing a great deal of our work on deregulation, and some of the effects that we are able to measure that it is having; we are in the middle of that work, and we do not have answers right now, but we will have some answers soon.

I would like to just review a few of the things that we have said in the past. Over the past few years we have evaluated a number of different factors that affect aviation safety.

We have reviewed FAA's legal authority; we have examined the effect of deregulation on the airline industry; we have searched for safety indicators that could be trusted; we have evaluated how well FAA is carrying out its responsibilities for establishing and enforcing safety standards; and we have evaluated a number of aspects of FAA's acquisition and operation of the air traffic control system.

Our work, as we have testified a number of times here, has shown that deregulation presented FAA new challenges for maintaining aviation safety, and that FAA did not always meet those challenges as effectively as it could have.

But it does not show that any kind of re-regulation is needed to improve aviation safety.

Some of the things we have found I would just like to highlight for you a little bit. FAA's role in aviation safety is defined in the

FAA Act of 1958, and it was unchanged by economic deregulation, as Senator Lautenberg told you this morning.

The Congress emphasized again and again that it was not intending to deregulate safety. In addition, DOT retained authority for consumer protection, merger approval and other regulatory matters after CAB sunsetted.

Deregulation, though, led to a number of changes in the airline industry. Competition lead to lower fares; greater demand; and more traffic.

Freedom of entry generated new airlines and new patterns, the hub and spoke systems you have been talking about.

The competitive environment made it necessary for airlines to control their costs more carefully.

Deregulation's full effect, however, was dampened for a number of years after 1978. Slow economic growth and fuel price increases held it down into the early 80s, and then the flight restrictions FAA instituted after the air traffic controllers' strike also dampened the effect.

So you did not see the full effect until just the last few years.

The impact of deregulation has also made the industry more visible. It has changed the face that the industry presents to the public.

Airlines have been entering and leaving the industry, and changing the scope of their operations. More air travellers; greater airline reliance on hub and spoke operations; and major changes in route structures and mergers, involving several major carriers; have focused a lot of attention on the industry.

Increasingly, the airlines have been criticized for flight delays, missed connections, lost baggage, all the other things we have heard about this morning.

FAA statistics show that near-midair collisions, runway incursions, and operational errors are up, when compared with past years; although as I have testified before, we are not certain of the reliability of all that data.

FAA has established a program of intensive special inspections, and levied well publicized fines lately. However, the overall accident rate shows that U.S. airlines as a whole have become safer over the past 20 years, and have lower accident rates than airlines in the rest of the world.

Now, though, much of our work shows that the FAA did not respond to changes in the airline industry as effectively as it might have.

For example, we have found that FAA has not kept its safety standards up to date, or assured that airlines follow its standards through its inspection program.

We also found that FAA is not renewing its air traffic control system as rapidly as it thought it would. And that the work forces that operate the system are stretched too thin.

For this hearing I went back over all the work we have done over the past couple years to see whether it suggested that either DOT or FAA needed more authority to correct the problems that we had found, and to maintain safety.

We found that FAA can limit the traffic if it needs to. It can control the number and the pace of the operations into and out of airports if it needs to.

It can establish whatever operating rules it thinks are needed to maintain safety. It can increase the work forces, with your help, within the parameters of the Federal budget and the appropriation process.

And DOT retains authority to assure that airlines are fit to provide service, and they also have authority to protect consumers against unfair practices.

So the bottom line of all that is that we think that FAA and DOT have plenty of opportunities to do their job better within the current structure. But we have not so far found any safety related conditions that could not be corrected under the current law.

That concludes what I prepared to say, and we will be happy to answer any questions that we can.

The CHAIRMAN. Well, that is well stated, because that is the main idea, the bottom line. Does the FAA have sufficient authority? Would we be asked by the Congress, as a Congress, I should say, for further authority; that they have not been able to do it.

So what you are finding is that while they have not been able to keep up-to-date safety standards, while they have not perhaps put on an adequate number of controllers, they are stretched too thin, as you indicate.

Then you look at the authority itself to see how we can correct it, and you find that authority in the Department of Transportation and with FAA?

Mr. MCLURE. That is right.

The CHAIRMAN. So we fix responsibility. That is the toughest thing in this town to do. And you have done it for us. There has been no denial of that from the Department of Transportation or the Federal Aviation Administration.

I have some statistics, but I will just put them in the record, where they have increased. This game of statistics, we are always being told that air travel is safer and safer.

I am continuing to see more near midair collisions. From January to September 8 this year there have been 857, an increase in 1987 over a similar period in 1986 of 37 percent.

But yet we are told we are safer. We have got more operational errors. Similar period, January to September, there have been 984; and that is an increase of 12.2 percent over last year.

Pilot deviations: 2,551, for an increase of 55.9 percent; and yet we are safer.

I do not know how you get to that.

Thank you a lot for your testimony.

[The letter follows:]

U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION,
Washington, DC, September 16, 1987.

SUBCOMMITTEE ON TRANSPORTATION,
COMMITTEE ON APPROPRIATIONS,
House of Representatives,
Washington, DC.

The enclosed airspace incident data are provided in response to the direction contained in Senate Report 100-48 on the DOT supplemental appropriations bill for FY

1987, requiring that the Federal Aviation Administration report to the Appropriations Committees on Near Midair Collisions, Operational Errors, and Pilot Deviations. The chart reflects monthly incident reports for January through August 1986 and 1987.

Identical letters are being provided to Chairmen Stennis, Lautenberg, and Lehman, and Senator D'Amato.

I hope this information has been responsive to your needs.

Sincerely,

T. ALLAN MCARTOR,
Administrator.

Enclosure.

AIRSPACE INCIDENT TRACKING SYSTEM STATISTICS, COMPARISON OF 1986 VERSUS 1987

[Number of reports]

Incident type	Year	January	February	March	April	May	June	July	August	Year to date	Year total
Near midair collisions	1986	57	46	78	66	71	72	88	78	556	840
	1987	58	88	79	96	97	91	117	126	752	([1])
Change (percent)										35.3	
Operational errors	1986	76	91	96	81	104	94	126	129	797	1,204
	1987	105	100	106	88	114	140	130	111	894	([1])
Change (percent)										12.2	
Pilot deviations	1986	165	174	188	158	171	174	190	183	1,403	2,575
	1987	238	226	311	271	324	298	311	208	2,187	([1])
Change (percent)										55.9	

[1] Not Available.

Data source: Office of Aviation Safety.

Note: Data As of September 2, 1987 are preliminary and subject to change.

DEFINITIONS

Operational error—An occurrence attributable to an element of the air traffic control system which results in less than the applicable separation minima between two or more aircraft, or between an aircraft and terrain or obstacles and obstructions as required by Handbook 7110.65 and supplemental instructions. Obstacles include: vehicles/equipment/personnel on runways.

Pilot deviation—A pilot non-compliance with a Federal Air Regulation or a North American Aerospace Defense Command (NORAD) Air Defense Identification Zone (ADIZ) tolerance.

Near midair collision—An incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft, or an official report is received from an air crew member stating that a collision hazard existed between two or more aircraft.

Senator FORD. Let me ask a quick question. I understand this may be your last appearance here, that you are getting promoted. I am glad honest people can get promoted around here. I compliment you.

In reviewing the authority, you state that you see no reason why FAA or DOT could not go ahead and do the things under the law that we find that are bothering us.

Yet you make a little proviso there that sets the whole stage. It can increase its work forces as needed within the parameters established by the Federal budget and appropriations process.

How do you feel about the Trust Fund being off budget and an independent FAA?

Mr. MCLURE. That is a real tough question to answer. I will try.

Senator FORD. Fine, I want you to. But you have to take into consideration, I am not sure Mr. McArtor is for or against an independent FAA. I think he would operate it which ever way we give it to him, and bless him for that.

The money is there, yet we hold it back. And Chairman Hollings said this morning, the money is there; we ought to try to get it to them.

But if you look at what has happened in the past, there is a cap. It has got to go through FAA through all the nitty gritty. Then you get to what FAA should have, and OMB says you have to cut back. So you cut back on FAA, and then we pound all over them because they are not doing their job.

So what I am trying to do is point out that there is a problem out there. There is money, and there is an agency. And why cannot we put them together, and have real oversight over them.

Can you respond to that?

Mr. McLURE. Yes, but remember that usually we try to come up here and tell you facts, but some of this is going to be opinion on my part, because the nature of the question is something that is not there, and I cannot review it.

Charlie and I and James asked ourselves this morning, could the system be safer if it had more money, if it had more money in the past, and if there were more money available now?

And I think the answer to that is yes. You can have a safer system. The question then becomes, how much more money do you want to spend to get how much more safety?

And I think if you ask Charlie, who is an expert in this, would it be worth spending a lot more money? Would you get your money's worth? He'd say, well, you are not going to save a lot more lives if you spend a lot more money. Because there are not a whole lot of people killed as it is.

So then you are talking about a margin of safety, and will the public feel more comfortable? Will they see things that make them feel better about it? And I do not know if you would see your money come through that way.

But as long as FAA is on the budget, you are going to have that budget crunch that you have to go through every year, and aviation safety is going to be compared with national security and all the other things that we, the people, are also trying to support, and also believe is important.

One thing that I think everybody should understand is that the Trust Fund, as it presently stands, cannot support FAA. So if you took FAA off budget, you would have to come up with some way to provide money to it. The Trust Fund is not enough.

Senator FORD. Is that including the monies that come out of general funds now, and excluding those when you take it off budget?

Mr. McLURE. Yes, if it continued to be funded out of the general revenue at its present rate, and it had the Trust Fund available too, then that would be a lot more money.

But I am not so sure that that is possible, because that would represent a considerable tax increase.

Senator FORD. Or the budgetary process, we could continue to put the 50 percent, we could still do that. And that would give us some that you think would be necessary.

Mr. McLURE. If it were off budget, you could continue to fund it at about the same level that it has been funded.

You would still have to go through the budget process, in the sense that you will have to supplement the Trust Fund.

Now, you could increase the tax, the passenger tax, and that way the Trust Fund would be enough.

Senator FORD. Let me ask you this. Do we not have two basic problems that we are facing? One, we have to stay ahead of the curve rather than behind the curve as it relates to equipment and the NAS Plan, and all those things that are necessary for air safety.

Mr. McLURE. Yes.

Senator FORD. We have to do that. And then, on the other hand, we have to take Charlie's view as it relates to—I do not know his last name, you called him Charlie.

Mr. McLURE. Charlie Cotton.

Senator FORD. Do we not have to—is it not difficult to take money—money's worth is one thing for material things, but money's worth for loss of life is another thing.

So we are caught in a dilemma, is spending money to save lives worth it? So we have got to stay above the curve, and we have to factor in the money spent and lives saved. That takes everything out of the economic structure that you get into.

Mr. McLURE. I think it is a terrific bind when the agency that is responsible for administering the thing is telling you, we do not need as much as you want to give us.

Senator FORD. The agency is not really telling us that. It is OMB that is telling us that; that as long as you got it on budget, and you have got $6 billion surplus, that means you can put $6 billion some place else, because you have got that kind of money to charge against.

And so the air traffic—or the air passenger that pays the tax is not getting his money's worth, or what it is intended for; it is going some place else, whether it be food stamps, welfare, defense, whatever it might be. That is $5.6 billion being applied somewhere else in the budget.

Is that not correct?

Mr. McLURE. It would be correct if FAA were not getting other money out of the budget. But if the Trust Fund were paying for all of FAA, that would be correct.

Senator FORD. Well, deduct that amount, and then see how much surplus. There is a $5.6 billion surplus, and that is part of the budgetary process.

And they are getting some money out of the general fund, that is true. But the $5.6 billion is still there to be applied to.

Mr. McLURE. That is true.

Senator FORD. Okay, thank you, Mr. Chairman.

The CHAIRMAN. I think, in thanking you, we ought to all understand this is like a dog chasing its tail whether it is on budget or off budget.

The budget is going to be considered in its entirety, on or off. And those on the Budget Committee and in the process understand. Either way it is going to be accounted for, and the bottom line on this one is whether the Administration is willing to spend it.

It is back to the old rhubarb we have going on now in government that the problem is the budget process. The problem is not the process; the problem is the problem. We just do not want to pay the bill.

And similarly with respect to this, is whether we want to spend the money. The money is there, one way or the other, in the Trust Fund or from the general revenues. We are ready to appropriate. And we understand that.

Thank you very much. We have some other questions, and we will submit them for the record, so we can try to convenience these other witnesses who have been waiting all morning.

Mr. McLure. Fine.

[The following information was subsequently received for the record:]

Questions of the Chairman and the Answers

SAFETY INDICATORS

Question 1. Administrator McArtor stated that he wants to develop a set of safety indicators to show whether the margin of safety is declining or improving. Mr. McLure, what suggestions would you have for such a set of safety indicators?

Answer. As we noted in testimony before this committee, we believe that FAA could help the Congress and public understand how safe air travel is by identifying a complete set of safety indicators, and then measuring them accurately and consistently from period to period. FAA has used three such measures—the accident rate, operational errors, and near mid-air collisions, but these three indicators do not present as full a picture as possible because of problems with their accuracy, consistency, and usefulness. For example, the accident rate, which is the most widely accepted safety measure, is most suitable for measuring safety trends over relatively long periods of time for broad segments of the aviation industry. The accident rate, however, cannot be used to address some important issues concerning air safety, as we noted in our March 1987, report on Department of Transportation management effectiveness.[1] Because accident rates reflect what has already happened, their relevance to accident prevention is limited. Thus, use of accident rates may not be the best way of assuring that the aviation system continues to operate safely. Also, there are so few accidents that the accident rate cannot measure significant differences in the safety levels of individuals airlines.

Thus, more specific measures—precursors of safety risk—are needed to identify and direct attention to unsafe or high-risk conditions. FAA uses near mid-air collisions and operational errors as additional indicators of national airspace safety, but has not yet developed indicators to measure how safely airlines are operating and maintaining their aircraft. We have suggested using the frequency and severity of airline noncompliance with safety standards as revealed by FAA inspections for this purpose. Changes in the number of deficiencies considered to affect safety could be used to indicate whether an airline's level of safety has changed from year to year and to determine where more FAA inspections may be needed. However, FAA needs to improve its inspection guidance and management information system before adequate and comparable data is to be available as a safety indicator.

At the request of Representative Barbara Boxer, and others, we are further studying the feasibility of developing measures of how safely individual airlines are operating. We anticipate that our report will be available in early 1988.

Until such yardsticks can be developed and tested, the assessment of the margin of safety will remain a subjective one, based on sometimes differing perceptions of safety and the public interest.

Question 2. Can't we use near-misses, air traffic controller errors, and pilot deviations as an indication of where the air transportation system is headed? Is it possible that because these figures reflect worsening problems, the FAA doesn't want to use them?

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[1] Department of Transportation: Enhancing Policy and Program Effectiveness Through Improved Management (GAO/RCED-87-3, April 13, 1987).

Answer. In addition to the accident rate, FAA uses near mid-air collisions and operational errors as indicators of national airspace safety. Near mid-air collisions are classified by FAA according to the degree of hazard to air safety. Operational errors occur when there is less than the applicable minimum separation distance between two or more aircraft or between an aircraft and terrain or obstacles or obstructions. In its July 1986 response to our March 1986 report on the controller work force, the Department of Transportation said that a major indicator of how safely the system is being operated is the number of operational errors that occur over a given period of time.

Recent fluctuations in these two safety indicators have resulted in calls to change to the air traffic control system. We have not evaluated how accurate FAA's data may be or whether the data are consistently collected from year to year, so we cannot evaluate the significance of changes in the level of reports.

As we noted in our report on Department of Transportation management issues,[2] FAA (and the rest of the Department) could make more use of indicators in the planning and management of programs. In our opinion, however, FAA's role in the development of the indicators referred to in the question has been mostly positive. FAA has developed and maintained the data bases on near-misses, air traffic controller errors, and pilot deviations, as well as other incidents, and has taken steps to improve the data in recent years. We have not found any evidence that FAA has avoided revealing any data.

DEFERRED MAINTENANCE

Question 3. As a result of your studies has GAO found any reduction in airline spending on maintenance since deregulation? How can we ensure that the industry does not cut corners on maintaining their aircraft?

Answer. When deregulation was being considered, there was concern that economic competition would lead airlines to forego appropriate maintenance in an effort to cut costs, and the concern has continued. We have not specifically examined patterns in maintenance costs since deregulation, but we have reviewed available studies of the effects of an airline's financial condition on maintenance and safety as part of our ongoing work on safety indicators. The results of these studies are inconclusive. While several studies reveal a weak statistical correlation between an airline's financial condition and its safety record or compliance with FAA regulations, an equal number of the studies find that there is no relationship between financial indicators and reduced maintenance.

In our opinion, an effective FAA airline inspection program is an essential way of assuring that airlines do not cut corners in maintaining their aircraft.

HUB AIRPORTS

Question 4. There is an increasing concern that because of economic pressures to meet schedules, airlines push their employees to turn planes around quicker than they sometimes feel is safe. Do you believe that the use of hub-and-spoke operations has hurt aviation safety?

Answer. While we have not explicitly studied this area, we have not seen any studies that suggest that the hub-and-spoke system has harmed aviation safety.

AIR TRAFFIC CONTROLLERS

Question 5. Do we have enough controllers to handle today's air traffic levels? How many more do we need? Are they needed at any particular facility?

Answer. As we have testified, FAA has fewer air traffic controllers today to handle considerably more traffic within the same air traffic control system than it did before the strike. FAA has not yet, however, identified for the Congress what level of service it expects its controller workforce to provide. We believe that until this is done, it will be difficult to determine the most appropriate size and composition of the controller workforce. We have been examining the standards FAA uses to determine its controller staffing requirements and will issue a report next year to the Subcommittee on Investigations and Oversight, House Committee on Public Works and Transportation. Our report will discuss the importance of staffing standards and FAA's staffing standards process, and will point out ways to improve the process.

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[2] Department of Transportation: Enhancing Policy and Program Effectiveness Through Improved Management (GAO/RCED-87-3, April 13, 1987).

Question 6. If we need more controllers and more experienced Full Performance Level controllers, should we be concerned about how many flights are operated in the system? Was the NTSB right in calling for flight restriction when they did so in May?

Answer. When we testified on May 28, 1987 before this subcommittee, we pointed out that FAA should do more to tailor air traffic to the capabilities of its air traffic controllers. In our testimony, we noted that FAA should reduce air traffic density when and where the air traffic system is operating at near saturation levels until it developed a flow control program that could meet the dynamic requirements of the system. An adequate flow control program must take into account not only the predicted quantities of air traffic, but also controller staffing levels and performance limitations.

We have supported the NTSB's recommendation that air traffic controller staffing levels and performance limitations should be accounted for in determining traffic capacity acceptance rates.

SAFETY INSPECTORS

Question 7. GAO has focused much of its time on the FAA's safety inspection workforce—both staffing and experience levels. Are the problems resolved yet? Is the FAA inspection system adequately performing under deregulation?

Answer. Starting in 1984, a number of FAA and GAO studies documented many serious weaknesses in FAA's airline inspection programs. Overall, we concluded that FAA had been slow to respond to the new challenges posed by airline deregulation. Specific weaknesses included:

Weak management controls resulting from FAA's decentralized management philosophy, including inadequate management information systems, and ineffective coordination among district offices;

Lack of staffing standards adequate to determine needed staff levels;

Incomplete planning guidance on inspection coverage for individual airlines;

Incomplete, outdated, and unclear guidance on performing inspections;

Outdated Federal Aviation Regulations; and

Outdated and inadequate training programs.

Following a comprehensive, nationwide inspection of all airlines in 1984 and a major management study of its airline inspection programs completed in 1985, FAA began a comprehensive, long-term effort to address the weaknesses described above. At the same time, FAA has hired additional inspectors to meet staffing deficiencies that it had identified. Initially, FAA has concentrated on improving guidance for performance of inspection and on improving training programs, especially for newly hired inspectors. Late in 1985, FAA started a program of special team inspections of selected airlines to provide intensive inspection surveillance.

Although FAA is taking steps to address weaknesses in its inspection program, it will be several years before these efforts take full effect. As we noted in our May, 1987, report,[3] FAA's problems are deep-seated, interrelated, and complicated. FAA management recognizes that strong management vigilance will be required to ensure that the initiatives progress as scheduled and that needed program changes are implemented as soon as possible.

The CHAIRMAN. We next have a panel of Mr. Henry Duffy, president of the Air Line Pilots Association; Mr. Donald McClure of Eastern Air Lines; and Mr. James Sexton of Eastern Air Lines, if they will come forward please.

Captain Duffy, we will start with you, sir.

STATEMENTS OF HENRY A. DUFFY, PRESIDENT, AIR LINE PILOTS ASSOCIATION; DONALD McCLURE, CAPTAIN, EASTERN AIR LINES, INC.; AND JAMES SEXTON, FIRST OFFICER

Mr. DUFFY. Thank you, Mr. Chairman.

On behalf of the 40,000 pilots who work for 43 airlines in this country that ALPA represents, we appreciate this opportunity to make a statement on the impact of deregulation on safety.

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[3] Aviation Safety: Needed Improvements in FAA's Airline Inspection Program Are Underway (GAO/RCED-87-62, May 19, 1987).

It is our opinion that deregulation has had a significant impact on safety, and we will offer two examples in this oral statement.

The printed copy for the committee record will include a paper by Mr. John O'Brien who is our director of engineering and air safety, that will cover all aspects of the effects on safety of deregulation.

Aviation safety has been much in the news these past few years, but because of all the rhetoric from various interested groups, it is difficult for the general travelling public to see beneath the headlines and make a clear assessment as to whether a safety problem exists in American aviation today.

One group points to the record number of near midair collisions, while another group counters with the continuing, enviable safety record posted annually by America's commercial airlines.

The finger of blame for the problem—and we believe that there is a problem—would have to point to many groups: to understaffed ATC facilities and overworked controllers; to pilots who lack the flying hours and the experience those hours bring; to airline managements intent on economizing to the detriment of safety standards that have been in place for years; to regulatory agencies that seem to have walked away from their traditional role as the policeman of the industry; to the Federal Government itself, which, through the Deregulation Act of 1978 opened, the floodgates and allowed the numbers of airlines to proliferate without regard for sound safety practices.

In fact, the focus is wrong in almost all of the dialogue heard concerning airline safety. Defenders of the system point to the absence of a major catastrophe as proof that all is well; but the frequency of accidents is not a good measure of industry safety.

The American air transportation system has built up an enviable margin of safety over the years that is currently being eroded. The margin of safety is the difference between the minimum standards set by the FAA and the higher, self-imposed standards of the airlines that were achieved through cooperative efforts of pilots and management.

Unfortunately, these higher standards have been lowered due to the competitive pressures of the marketplace brought on by deregulation.

This has led to a slow erosion of the safety margin that has been so painstakingly built up over the previous half century.

In short, the safety net is coming unravelled.

Carriers do not have to break the rules to make cost-saving safety cuts. Willful violations by unscrupulous carriers do appear to be on the rise, but that is only part of the problem.

Rapid expansion within our industry has diluted the overall experience of the men and women who make the decisions that affect safety.

These decisions, made at all levels from the chief executive officers down, may well be very well intentioned, but not in the best interests of safety.

Cost conscious managers shave a little here, a tad there, while the FAA offers its technically correct but misleading assurances that most airlines are operating within legal limits.

What that means is that the big difference between legal, which is the FAA minimums, and safe, the self-imposed higher standards agreed to by both pilots and management, has been narrowing because of the pressures of deregulation.

Let me illustrate how a management, with its eye on the bottom line, can legally gut the high safety standards that were once common practice in this industry.

Each type of aircraft has a Minimum Equipment List (MEL) authorized by FAA, and aircraft can be legally flown with certain items inoperative. The FAA dictates that repairs of MEL items must be made promptly, and that a plane with an inoperative MEL item cannot depart an airport where repairs or replacements can be made.

For example, it is "legal" for a plane to have one inoperative generator, but it is not necessarily safe, depending on the weather, the time of day, and the proximity of alternate airports.

Yet I always notice that certain company spokesmen, when defending their actions to the media, always fall back on the truthful, but less than honest, claim that their operations met legal minimums.

You never hear them talk about maximums.

To get around both the letter and the spirit of this directive, some airlines have reduced their spare parts inventory and mechanic work force, thereby reducing the number of airports where repairs or replacements can be made.

This has the effect of allowing managements to keep planes flying with known deficiencies until it is time for the scheduled maintenance of those planes.

This bending of the rules is not confined to one or two airlines, although some abuse the system more than others.

Airlines are quick to play "follow the leader" when they see a competitor gain an advantage.

It is not surprising, therefore, that in a recent survey of our members, it was found that pilots throughout the industry reported an increased number of items carried on the inoperative equipment list under the MEL concept.

Fully 50 percent of the pilots responding noticed a decline in the maintenance or the air worthiness of the aircraft that they were flying.

Approximately 50 percent said that captains were sometimes pressured into accepting aircraft with an excessive number of deferred maintenance items.

The same percent also said that repairs for inoperative equipment were being deferred for excessive lengths of time, even though the planes passed through maintenance bases where repairs were legally mandated to be made.

The pilot survey also confirmed that the number of full service maintenance bases had declined in the last two years.

Under deregulation, exposure to risk for passengers and crew has decreased dramatically as airlines scurry to find a competitive edge to keep them in the black. It is an exposure which appears to have no remedy in the current state of affairs, since the FAA, which is mandated to carry out inspections and to enforce standards, has been spread too thin to deal effectively with the geometrical increase in flights, planes and airlines since 1978.

Established carriers have been put on the honor system with regard to safety standards, while the FAA concentrates on newer airlines with obvious problems.

The honor of some of those carriers has become suspect as they jockey for advantage.

While managements struggle to maintain their competitive edge by increasing productivity demands on airframes, their operations department struggle to fill cockpit seats. Job possibilities have soared for pilots, and current statistics indicate that we expect major, national, and regional airlines to add between 4,000 and 6,000 pilots to the work force per year for the next decade.

For many years, the military was a fertile source for trained pilots with high performance jet flying experience. Currently, that is not the case, and a factor of 83 percent of airline pilots with military flying experience has now fallen to only 40 percent.

The decreasing supply of military pilots, and the increasing demand for commercial airline pilots, have hit the regional airlines hard.

Between 30 and 50 percent of the pilots flying for regionals leave; 90 percent of them go to work for major airlines.

The military and the commuter airlines together continue to supply a large share of the major airline pilot work force, but separately they cannot meet the present or future demand.

New pilot sources are general aviation, in-house airline training academies; and possibly foreign countries.

This competition between airlines, as the pilot shortage worsens, raises concerns about maintaining the qualification standards for becoming an airline pilot.

The "average" flight time of airline new-hires is holding steady at about 3,000 hours, but the amount of jet flying time required by airlines has gone from 2,300 hours of flight time in 1983 to 1,600 hours in 1984, to 800 hours in 1985.

This is an obvious downward trend being watched very closely by us at ALPA. We have petitioned the FAA to upgrade licensing standards for Part 121 on air transport pilot ratings and commercial tickets.

ALPA also supports enhancing the efforts of 400 colleges and universities that now offer courses in aeronautical studies by establishing an accredited discipline in commercial aviation.

This will help ensure that during times when demand for pilots is high and supply is low, that the highest standards of education and professionalism are maintained for commercial airmen.

Regional airlines must be vigilant in their selection of new candidates, and especially, in the quality of the initial and continuation training programs for them.

The transient status of the regional pilot is a fact of the industry, as major airlines continue to hire at higher rates. The result is that pilot progressions through regional copilot and captain positions can be alarmingly fast.

We know that some of the regional carriers have experienced a turnover of more than 50 percent of their pilots. In fact, one of those carriers has allegedly hired more pilots in the last year than its current total force, for a statistical turnover of more than 100 percent.

Training standardization must be maintained by those companies, and monitored closely by the FAA.

The growth in demand in the industry must not be allowed to shrink the margin of safety any further. Major airlines hiring from this manpower source must also maintain the highest standards and operations management.

They must avoid the flawed concept of simply meeting the minimum requirements of the Federal Aviation Regulations.

Without a safety margin, any mistake may be a potential disaster.

As aviation professionals, we can do far more than merely hope that serious safety problems will somehow be magically resolved. Past experience tells us that the solution to the safety problem lies in all of us who face these problems daily, maintaining that extra measure of vigilance in detecting the problems.

We must all insist that concern for safety be raised back up to the level that it once enjoyed.

Thank you, Mr. Chairman.

Thank you for the opportunity to read this presentation, Mr. Chairman. This concludes my formal testimony, and I would be happy to answer any questions you may have.

[The following information was subsequently received for the record:]

AIR LINE PILOTS ASSOCIATION
1625 MASSACHUSETTS AVENUE, N.W. || WASHINGTON, D.C. 20036 || (202)797-4000

November 2, 1987

The Honorable Ernest F. Hollings
U. S. Senate
Washington, DC 20510

Dear Mr. Chairman:

This is in response to your letter of October 16, 1987, requesting information about the subjects discussed during my testimony before your committee on October 15, 1987.

You will note that on the attached pages I have repeated your questions and added my answers in the same order as received.

If you have additional queries, please feel free to request information.

Thank you for your effort to improve aviation safety.

Sincerely,

Henry a. Duffy

Henry A. Duffy, President

HAD:ag
enclosure

Question #1: You mentioned in your testimony that the frequency of accidents is not a good measure of aviation safety. If that is the case, what indicators should we use to better reflect the margin of aviation safety? What about the number of near-misses and controller errors?

A simple tally of aircraft accidents versus hours, segments, or miles flown, is an unnecessarily restrictive measurement of aviation safety. The system develops data after the fact since statistics change most dramatically with the occurrence of the accident, therefore, programs generated are reactive in nature.

A program which monitors trend indicators within the industry offers the opportunity for accident prevention rather than accident reaction. For instance, an increase in near misses and controller errors, represents an unfavorable trend requiring preventive measures such as increased controller training and manning, and research and development of TCAS.

Trends highlighting increased levels of deferred maintenance or even inferior maintenance in general should prompt increased surveillance by the Principal Maintenance Inspector responsible for the company.

Exposure to risk is the measurement key, and factors bearing upon the level of exposure could be financial, operational, regulatory, or even legislative. Identification of unfavorable trends allows active accident prevention.

Question #2: You also discussed the rapid expansion of the airline industry since deregulation. Should we limit the number of new entants or the number of flights into certain airports until FAA controller and inspector staffing and experience levels are increased?

The FAA has established airport acceptance rates for all of the major pacing airports in our national airspace system. These rates are very dynamic and depend on many factors, the most significant of which is weather. If properly applied by the FAA Central Flow Control Facility, the total number of airlines trying to access an airport becomes mute as only a specified number of flights per hour are permitted to land. Who they belong to should not be an issue. Similarly, Central Flow Control can manage both arrivals and departures so as not to overload the controllers' ability to safely handle the amount of traffic at any given time.

Therefore, additional operating constraints do not appear necessary at this time. Instead, efforts must be directed at increasing airport capacities through the building of additional runways, the enhancement of current procedures and supporting other initiatives proposed by the industry task force on increasing airport capacity. Enforcing established airport acceptance rates should foster efforts by the airlines to spread out peak traffic demands through scheduling. The top DOT and FAA management must provide strong support and backing for Central Flow Control and other ATC managers when flow and capacity restrictions are imposed. If these initiatives do not produce the expected results, it may be necessary to arbitrarily restrict entrants.

Question #3: What are the safety problems related to having large numbers of planes fly into a hub airport at the same time, turn around in roughly an hour, and depart at the same time? Does this give you, as the pilot, enough time to complete all required safety checks?

The hub and spoke systems, used by many airlines to achieve higher productivity with their aircraft and crew members, would seem to be an efficient management tool for the airline industry. The system allows them to serve many more markets while pooling heavy support resources at their hubs.

Technically, an aircraft transiting a major hub has the opportunity for maintenance support each time it passes through that hub. Passengers have the opportunity for some carrier service between all points that the carrier serves, as long as they transit the hub. Company aircraft transit hubs utilizing time banks, arriving and departing within tight time constraints to achieve connections. However, one late incoming aircraft carrying connecting passengers for several outgoing aircraft affects several schedules and potentially several hundred people. Pilots sense the pressure to arrive on time and depart on time in spite of weather, maintenance, or traffic problems. Maintenance often succumbs to deferring rather than fixing broken items. ATC is exposed to greater potential for error while controlling tightly compressed schedules.

Marketing efficiency requires a maximum support effort for each bank of arrivals and departures, and flexbility often disappears even though it was one of the prime advantages for the cretion of the hub originally.

Question #4: You stated that although certain airlines are meeting FAA minimum standards, the margin of safety is being reduced. Are FAA safety standards adequate, or if they have become minimums, should they be increased?

The margin for safety increases proportionately whenever operations are conducted under more stringent conditions than those required by FAA minimum safety standards. Minimum standards are, by definition, the minimum level at which operations may be conducted while maintaining safety. Operations performed at minimums are performed without a cushion.

In many cases, special exemptions and waivers have been issued by the FAA, allowing carriers to operate below some minimum standards. Varying interpretations of certain directives by local FAA offices and individual inspectors may also weaken some minimum standards.

In the heat of battle, under the financial strain for bottom line success, safety margins disappear with corner cutting.

The standards are adequate as a minimum guide only, certainly not as full operational standards.

Question #5: If the margin of safety is shrinking, are we on the verge of a string of major airline accidents? In other words, with inexperienced pilots and new controllers, isn't there a serious potential for disaster?

There has been no catastrophic breakdown in the ATC system and airline industry that points to a serious potential for disaster, nor do we see one coming in the near future. What has occurred is a slower more insidious erosion of the level of safety enjoyed prior to the PATCO strike and the advent of deregulation. This situation is identified by the continuing climb of unfavorable safety statistics such as operational errors, runway incursions, and near midair collisions. If left uncorrected, the problem could deteriorate to the point the FAA would have to take more aggressive action to deal with a much more serious and complex situation. ALPA has suggested on many occasions the way to address the problem of controller inexperience is to allow the fired controllers to compete for the available jobs in the controller work force. To date, the FAA has chosen not to accept this suggestion.

As for the pilot experience level, we feel the veteran airline pilots of this country have had to act as a buffer for the system and absorb more than their share of responsibility for system safety. The FAA must increase both the experience level and number of air carrier inspectors in order to insure it fulfills all of its inspection and enforcement responsibilities.

Question #6: Mr. Duffy, you stated that in the next decade, 4,000 to 6,000 pilots will be hired each year. Where will these pilots come from? Do we need to increase the minimum experience levels for new commercial pilots?

In the first six months of 1987, 5,288 pilots were hired by U.S. airlines. The total flight time for these pilots varied from 700 to 19,500 hours. Most of these pilots, approximately 60 percent have no military experience. In the past, 60 to 80 percent of the airline pilots hired had military experience.

Our concerns in pilot hiring are in two general areas, total pilot flying time and flight experience. We do not intend to cast aspersions on civilian student pilot training programs, but military pilots generally receive more intense and comprehensive training during their student pilot experience.

Low total time pilots with minimum exposure to varied experience concern us. We filed a petition for rulemaking (attached) with the FAA in August, 1986, asking for changes in Part 121 pilot requirements. We asked that captains (pilot in command) be required to have a minimum 2,500 hours total time and first officers (second in command) have a minimum 1,500 hours total flight time.

The CHAIRMAN. That is a dramatic statement, and a very worrisome one.

Who do you fly for, Captain Duffy?

Mr. DUFFY. Delta Airlines.

The CHAIRMAN. Well, I hope Delta, the FAA, or any other airline employing any of these other witnesses will not be trying to penalize in any way you who really have got your life in your hands as well as us who travel with you, to go out and lay this on the line so we will all know.

You lay it right on the line and itemize how we are fudging and cutting corners at every turn.

Let us hear then from Captain McClure next.

Mr. MCCLURE. Mr. Chairman, distinguished Members of the committee, thank you for allowing me to appear before you today to discuss aviation safety from an airline pilot's perspective.

I am Capt. Don McClure. I have been a pilot for Eastern Air Lines for 23 years. I am also the chairman of the accident investigation board of the Air Line Pilots Association, and have been involved in safety-related programs for the majority of my aviation career.

In addition to my oral remarks here today, I will certainly be available to answer any questions you may have.

Air safety in our country is second only to motherhood, apple pie, and the almighty dollar. From the 1930's to 1978, the airline industry conceived, birthed, nurtured and raised a system of safety which was envied by the world.

This enviable record was made possible by the cooperative efforts of such bodies as the airlines, the Air Line Pilots Association, the CAA, the CAB, the FAA, the NTSB, and the Flight Safety Foundation, to mention a few.

Prior to deregulation, the dedication of monies for air safety was only limited by the point at which diminishing returns on expenditures became controlling.

Subsequent to deregulation of the industry in 1978, a myriad of bankruptcies, failures, mergers, and acquisitions have taken place.

The safety activities of the present day surviving companies are now controlled by one common factor: the bottom line.

There are today two basic types of airline companies: The financial solvent, and those who are debt ridden. When those who are debt ridden attempt to compete, they reduce spare parts inventories to bare bones; they schedule aircraft so tightly that there is no time for proper maintenance; and they rely on the vagueness of the minimum equipment list preamble, such that aircraft are routinely flown for weeks through maintenance bases without repairing such items as fuel gauges, altitude alerting systems, generators, thrust reversers, flight and cockpit voice records, all of which either directly or indirectly affect the safety of your flight when left unrepaired for extended periods of time.

The FAA half-heartedly attempted to address the quality of safety provided by air carriers in a March 1984, memo from the manager of the air transport division to the manager of the aircraft maintenance division.

This memo says, quote, "Section 601 of the Federal Aviation Act of 1958 prescribes standards and regulations for issuing operating certificates to air carriers."

This memo goes on to say, and I further quote: "It requires that the holders of air carrier operating certificates have the responsibility of providing air transportation with the highest degree of safety."

There should be no misunderstanding about the meaning of the act. It recognizes that this duty and responsibility rest directly on the air carrier, irrespective of any action taken or not taken by an individual FAA inspector or the FAA.

These air carriers who short the public on maintenance now routinely attempt to coerce pilots to take aircraft with systems and components inoperative, through maintenance bases day after day.

For example, one of Eastern's Boeing 727 air shuttle aircraft had an altitude alert system inoperative. This system provides the flight crew with warnings when they are approaching an assigned altitude, or if they inadvertently deviate from that assigned altitude.

The ultimate purpose of this device is to prevent midair collisions.

When I picked up this aircraft on September 6, 1987, the altitude alerting system had been inoperative since August 22.

I refused to fly the aircraft.

Four days later, September 10, 1987, Captain Knudson refused to fly the same aircraft and was grounded by his chief pilot.

The reason that this aircraft had not been fixed was due to the unavailability of replacement parts. The Federal Aviation Regulations require that an air carrier maintain an adequate stockpile of parts to repair its aircraft in a timely fashion.

I might add, this is a part that is required to be fixed before departing a maintenance base, and for that period of time that aircraft flew consistently to maintenance bases, Washington, New York, and Boston.

I personally was removed from a flight on August 10, 1987, by the vice president of flight operations for refusing to fly an aircraft with one of its navigation systems inoperative. I was sent home, leaving 149 passengers and six crew members on board the aircraft.

The next captain who was called also refused to fly the same airplane. It finally departed three hours late, when the maintenance department saw fit to fix the navigation system.

As a matter of fact, had maintenance decided to fix this aircraft when I first talked with them one hour prior to departure or at any of the three previous stops, which were also maintenance bases, the aircraft would have departed on time.

These are but two examples of the problems which occur systemwide on a daily basis at Eastern Airlines since its acquisition by the Texas Air Corporation.

We captains are well aware that by law we are the final authority as to the safe conduct of the flight. We cherish and cautiously guard this authority. We also judiciously exercise this authority.

However, the frequency of its use becomes greater as the bottom line managements attempt to force us to fly unworthy and/or unsafe aircraft.

Thank you very much, sir.

The CHAIRMAN. Thank you.

Let us hear from First Officer Sexton now.

Mr. SEXTON. Thank you, Mr. Chairman, for allowing me to have the opportunity to come today and express my concerns about air safety. My remarks will be brief and they will be narrowly focused on my experience as a pilot for Eastern Airlines.

My name is Jim Sexton. I live in South Carolina with my wife and three children. I fly as first officer on the A-300 domiciled out of New York. I have been flying for Eastern for 17 years.

Prior to that I flew in the United States Navy for five years. Most of my Navy flying was from aircraft carriers, and I saw combat in North Vietnam. As a matter of fact, one of your committee members, Senator John McCain, helped teach me to fly back in Meridian, MS.

During the past 17 years, I have experienced several management teams at Eastern Airlines and for 16 of those years I have been pleased and have been impressed with the professional and effective approach that my company has taken toward air safety.

I have witnessed management respect for the captain's authority, in that if a captain says an airplane needs to be fixed it was fixed. I have witnessed management respect for the lead aircraft mechanic's recommendations concerning aircraft repairs.

And most importantly, I have witnessed a joint team effort between these three key groups—management, flight crews, and mechanics. And the underlying rule was that, regardless of other differences between those groups, a safe airplane was essential, at whatever the cost. And I submit to you that is exactly as it should be.

I wish I could stop at this point in my testimony on a positive note. However, this has not been standard practice since the Texas Air Corporation and its management squad have taken over at Eastern. I have witnessed an entirely new approach toward safety from this new management group, and, very frankly, I predict disaster unless this bottom line financially-oriented group alters its course.

If you will bear with me for just a few moments, I will quickly share with you a couple of incidents that will serve as examples to support my convictions.

To save time, I have supporting data in the form of aircraft maintenance logs and flight dispatch papers which are available for the record if needed, and I have other examples if you should later require those of me.

First I would like to share with you my recent personal encounter with management's very shrewd weapon of intimidation. On Sunday, September 6, 1987, as Capt. Bill Carney and I were taxiing Eastern flight 11 out to the runway of LaGuardia for a flight to Miami, we ran through our flight control checks and we were not satisfied with those checks, and we returned to the gate for repairs.

Maintenance crews worked on this particular aircraft literally all day. They first replaced the yellow system hydraulic pump. This improved the situation, but maintenance would still not release that particular airplane to fly. They replaced an accumulator, and finally they repaired a Shrader valve before certifying the aircraft airworthy, and we later took the plane.

Later in the week, after experiencing similar flight control problems, Captain Carney and I apparently triggered a bell somewhere in management office, because they assembled five men to interrogate us. They had the A-300 fleet manager, two of his assistants, the Miami technical supervisor, and the A-300 technical manager from Toulouse, France, meet our flight as we passed through Miami.

After lengthy discussion, these men observed our control checks in the cockpit and they went to great lengths to attempt to convince us that all was normal and it was simply our method of checking the flight controls that was improper.

The following Monday, at my home in South Carolina, I received a call of a representative of the chief pilot's office, and he informed me—and I quote: "Your name has been red-flagged, and if you cause any more flight delays due to improper control checks we are going to call you in."

He also stated: "It is not your job to check the pumps." And he also stated: "You just lucked out that you discovered a bad pump."

To realize the degree of intimidation and the pressure put on me as an individual to fly aircraft that I consider unsafe, please consider that this phone call was in light of the fact that it is common knowledge among flight crew members and mechanics at Eastern that at least 12 captains have been suspended from flight duty recently for refusing to fly aircraft they considered unsafe, and that a mechanic was fired in Boston recently after he refused to sign off an aircraft that he thought was unsafe.

My wife is here with me this morning and she is absolutely convinced that I will lose my job because of my testimony here today, and she may well be right.

The **Chairman**. Well, I think you just saved your job. Go ahead.

Mr. **Sexton**. I hope so.

The second event—and I will try to be brief. The second event occurred this past Friday on Eastern flight 453 from Atlanta to Miami. We picked up an aircraft in Atlanta which had been flying around the system for a couple of days with a low speed aileron inoperative.

Eastern control in Miami kept convincing crews, including us, to live with the very confining restrictions of 250 knots or Mach .55 to take this aircraft to the next station, because they claimed it was set up to be repaired shortly when it reached a station where there were parts.

What they did not tell us, was that the restrictions were so limited that the computer was unable to print out a proper flight plan, and that it would take extra precaution to keep the aircraft within the 1.25g load box.

After we became airborne, we experienced the onset of low-speed buffet when the autopilot was turning the aircraft.

Now, I realize this is a little technical. The point in my example is that, although there may be a proper time to fly an aircraft close to its limitations and to explore its parameters, the proper time is certainly not when there are passengers on board. And to squeeze a little more profit is certainly not a valid reason for doing so in my opinion.

In passing, I will mention that twice within the past 45 days I have been in the cockpit preparing for departure when the mechanic has approached me, and he will be looking over his shoulder. He is trying to spot his supervisor.

He is imploring—each of them implored me not to use his name. One told me of an item on the overhead panel that was broken and not in the log book. The other one told me to watch out because the item that was broken was not in inventory and they would try to run around the problem.

Then each of these mechanics scurried out of the cockpits. In the 17 years I have flown with Eastern, I have never witnessed this type of conduct.

I also think it is noteworthy that in 17 years of flying with Eastern, I have experienced perhaps—and I am guessing—perhaps six aborted takeoffs. The frightening part to me is that two of these have occurred in the last 30 days, and both due to mechanical problems.

In closing, and perhaps in a lighter vein, after my teenage children saw the recent movie "Top Gun," because of my Navy A-4 experience I was actually a hero around my home for maybe two days. It is hard to impress teenagers.

If you saw the movie, you may remember the song "Great Balls of Fire." There were lyrics in that song that said: "You shake my nerves and you rattle my bones." Gentlemen, the only reason I am here this morning is to let you know that as a professional aviator my nerves are shaken by the present approach that Eastern's management has towards air safety.

And I can assure you that I do not want anyone to hear my bones rattle.

I very respectfully plead with you as a committee to initiate strong action to quickly correct this present dangerous approach to air safety, so that we do not witness any needless great balls of fire in our national air transportation system.

As pilots, we need your help. I need your help in order for me to keep my flight safe.

I thank you for your attention and I will attempt to answer any questions you may have. Thank you, Mr. Chairman.

The CHAIRMAN. Let me thank each of the three of you for your fortitude and character in coming forward, because the problem is very, very serious. We can give all the statistics, but when pilots have been flying for years on end and flying successfully and liking the company they fly for and otherwise, and then have to bring forth these factors, I know it does not come forth very easily.

I appreciate the courage of each of you in laying it on the line, so we can have something done about it.

I see in the audience our Administrator of the FAA. I am sure he is listening. I am sure from what you have stated—because as you know, Mr. Sexton, I have talked to other pilots and Captain McClure and Captain Duffy. They are not isolated.

The bottom line is what they are doing is sacrificing safety for profits. And how do we really get at this? I do not know any better way than to bring it right out into the public view and attention.

And with respect to both those airlines, like Delta and Eastern, they have been my best friends. I served on the Hoover Commission task force with Capt. Eddie Rickenbacker back in 1954 and got a lot of the routes on convenience and necessity.

The same with Dave Garrett. He is from Belton and recently retired from Delta Airlines. So I know them all, and I can assure you my big mouth will be going if they try to take any punitive steps towards any one of you. I know you are doing your duty and you are trying to save not only our lives, but your lives and everything else of that kind.

There is nothing else we can do but attest to this kind of situation. It is very, very worrisome, and I hope we will get away from statistics and down to exactly what is happening, because we are finding that these airlines are being run by a bunch of the financial managers, market forces.

And it is quite apparent that the economies of size and mergers and safety and maintenance and everything else have taken over, and safety is suffering.

So I don't have any really cross-examination. Let me yield to our chairman here, Senator Ford.

Senator **Ford**. Mr. Chairman, I am hard-pressed to ask questions. I think the statements here are loud and clear, and I think they will be effective.

What we will see as I feel it will be some, well, we have taken you to court and we found that you all were wrong, and it is a tactic and it is a calling in sick tactic and that sort of thing, which I do not believe.

I think you all laid your lives and your jobs on the line in coming here today, and I do not believe you have any reason to tell us something that is not true.

Mr. Chairman, it is a disquieting thing. I have dealt with pilots, both private and commercial. I have talked with them at airports. They did not know me at times from Adam. I happened to be one of the passengers on the plane and I would sit down and have a cup of coffee with them and I would chat with them some.

I have a feeling that these two pilots and Captain Duffy are giving us some information that we need. What disturbs me is how we get to it and how do we give them the kind of help they need for them to keep their professional standards at the high level they want to keep it.

Now, I understand that the percentage of pilots from the military has been diluted considerably and that has created some problem. I just think that the greed for money here is going beyond what anything FAA can do without just having carloads and busloads of inspectors unload on everybody every day.

I am impressed, Captain Duffy, with your interest in the higher education and training and increased professionalism to get them into the system. That is going to take a while.

I know I have been getting all these cards from Eastern Airlines. I am sure you all are accused of doing that just to get after the management. That is somewhat concerning to me.

What is the solution? What do we need to do as Senators? I do not want to damage the ability of an airline to make a dollar, because that helps with your income. If we are flying them safely and we have truth in scheduling and we do the things that encourage individuals to get on that airplane, then things are going to be better.

We are trying, in the limited sphere that we are in, to improve FAA, to give them—to eliminate the capacity problems.

But that does not get to the problem I hear this morning. That does not get to it unless and until FAA, I guess, has the authority—I am not sure under the law if they have the authority to change what our friends are telling us from Eastern Airlines this morning or not. Do you know?

Mr. **Duffy**. Mr. Chairman, if I might suggest, Administrator McArtor has put forth some very good suggestions on how we might get at this problem. First of all, he came at pilots. We are able to stand up and take our share of that burden.

But the next thing he said was CEO accountability. If there is a breakdown in the safety ethic on Eastern Airlines, it is a management responsibility and it ought to go right to the feet of that CEO.

And that is where we would strongly support the new FAA Administrator, and he needs the backing of the Congress in doing that. When confronted with the type of situations that both of these pilots have put forward here, we need stronger captain authority because it is an old concept—it dates back to the thirties. We used to call it pilot pushing, and it is management leaning on a pilot to take an airplane that should not fly.

And it is not a new concept. It is just being revised with deregulation and the economic pressures.

The CHAIRMAN. Well, let me ask you, Captain Duffy. You are emphasizing CEO responsibility. Did you go to the CEO, to the management, or are you coming to us as a first resort or a last resort?

Someone would say, oh, these pilots are coming up to get on TV. What do you have to say about that?

Mr. SEXTON. Senator, I will address that. My first stop was there in Miami when the five individuals came out. One of those individuals representing the company was the A-300 fleet manager. He is in charge of all the A-300's at Eastern.

I expressed to him my concern about the control problems on this particular plane and other planes, several control problems. He said, "Well, you are checking the controls too rapidly." In a control check, by the way, you just check the ailerons, check the elevator, and you check the rudder.

He said, "The control rate should be turned 22½ degrees per second." I said: "Ron, I have never seen this in any of my manuals." And we have a thick flight manual that I am responsible for knowing.

He said: "Well, it is in the only flight manual that counts; it is in the flight manual that comes from Airbus in Toulouse." And I said: "You have seen that?" He said, "Yes." I said: "Would you mind sending me a copy to my home?" He said: "Not at all; I would be happy to." He later sent me a page out of that book, but it said absolutely nothing about 22½ degrees.

In my opinion, he was not either—apparently he was not telling me the truth. He lost my confidence, anyway, when the manual did not say what he said it said.

The second stop in the loop of the company was my chief pilot. When I get a call from the chief pilot's office in my home intimidating me, there is a man I certainly cannot talk back to, because he is going to fire me or he is going to discipline me.

FAA would be the next logical stop, and I am losing confidence there as a pilot. And I am speaking strictly as a line pilot that lives down in South Carolina. FAA allows you to carry so many MEL's. MEL is a continuing item, something broken on the airplane, that it is safe to continue the airplane to the next station but then it needs to be repaired, or maybe a couple more stations and it needs to be repaired.

All the carriers have this procedure in effect. Over at Delta Airlines, I am told that the average number of continuing items in their fleet, entire fleet on a daily basis, is from 12 to 15. At Eastern Airlines, I am told that the continuing items are 300 and it has been as high as 500.

Now, FAA allows this. It is okay under FAA rules. I also understand that we have been petitioning FAA to tighten up on this continuing items list. You know, maybe 100 is reasonable; 300 or 500 is not reasonable. Tighten up on the list.

I also understand that we have been petitioning FAA for five years to do this. That is too long. I am losing confidence. I understand that within the last year the southern region of FAA—and I may be incorrect; if I am, correct me—the southern region in Atlanta said: Okay, you are right, we need to tighten up these CI's.

The letters came out, and then counsel for FAA, either in the southern region or at the national level, said: "Hey wait, you are stepping outside your boundaries; that should be decided on the national level." And we are still waiting.

So that is the reason I am here this morning, as a last resort.

The CHAIRMAN. I understand.

Mr. McCLURE. Mr. Chairman, excuse me. If I might shed a little light on that same subject, about in the middle of 1985, I was part of a group of pilots on Eastern Airlines who, subsequent to our accident in South America, were working with the company's flight operations personnel, to attempt to improve a couple of things.

One was our operation in South America and the other one was what we perceived as pilots, and I think the flight operations department perceived at the same time, was a deterioration in the quality of maintenance on Eastern Airlines.

And this was directly reflected by the number of these continuing items or deferred maintenance items that are carried in an aircraft's log book. The thing that disturbs me the most is that in the last three year period as I have watched the trend in the daily operation at Eastern at least in the airplanes that I fly, we really have not seen a whole lot of a change in the number of continued items. And what is even worse, now we are being coerced to take the airplanes when we feel that they are not safe to go or they are not airworthy.

And I think one place where you may be able to help Mr. McArtor and his group is this debate about whether an airplane may leave a maintenance base because there are no parts, there is not time to fix it, or there is not manpower, which is the contention of Eastern Airlines, according to an MEL restriction.

The men in the FAA that I talked to that are the maintenance inspectors wish the FAA would come up and be a little more hard line on the companies with this, so they would have some teeth and be able to enforce it and make them fix the aircraft.

The CHAIRMAN. Well, you have answered the concern of the committee, that it is just not a one-time thing and it just did not happen this week, but it has been building, and it is not isolated.

And it is very, very disturbing. There is no question about it. So we can talk about the statistics and everything else of that kind, but to hear first-hand this kind of experience, and the cutting of corners and everything else like that—we will be hearing, no doubt, from Mr. McArtor again and perhaps from the management of either company. We will invite them to explain themselves.

You have done a very positive service to us all.

Senator FORD. I am just interested in knowing how many planes you have been on recently where the windshield has been changed.

Mr. SEXTON. None, sir.

Mr. McClure. I had one changed in LaGuardia on the Air Shuttle the other night. I think that is probably the second one in two years.

Senator Ford. Have you had any?

Mr. Sexton. I have never had any.

Mr. Duffy. No.

Senator Ford. Thank you.

The Chairman. Thank you very much.

Mr. Duffy. Mr. Chairman, I would not like to leave here with any misimpressions. I am here as the President of the Air Line Pilots Association, and it would be a disservice to Delta if it were implied that their maintenance was what we were talking about today.

They are known to have a very fine maintenance system. I am addressing the problems that we are having in the overall association, rather than Delta Airlines.

The Chairman. Well, very good. I am glad you cleared that up.

Senator Ford. And I am also—probably, if you would ask anybody in this room who is not associated with the airline industry who Delta merged with not too long ago, they probably could not name the airline, because it was so smooth.

Mr. Duffy. That is true.

The Chairman. Very good. Thank you very much.

We will have the next panel, Mr. Steve Kolski and Mr. Don Young. Mr. Kolski is the vice president and regulatory counsel for Eastern Airlines; and Mr. Don Young the President of Southern Jersey Airways.

Also Mr. John F. Thornton; I am going to ask Mr. Thornton who is the National Coordinator of the National Air Traffic Controllers Association, to come forward as well.

The hour is late, so please proceed, Mr. Kolski.

STATEMENT OF STEPHEN J. KOLSKI, STAFF VICE PRESIDENT AND COUNSEL FOR REGULATORY COMPLIANCE, EASTERN AIR LINES, INC.

Mr. Kolski. Mr. Chairman, my name is Stephen J. Kolski and I am Eastern's staff vice president and counsel for Regulatory Compliance.

I have over 21 years experience with three different airlines. From 1966 to 1980, I was employed at National Airlines, spending the last five years as staff vice president of flight operations.

In 1980 I was one of the founding officers of New York Air, and remained with that company until its integration into Continental in January of this year, at which time I joined Eastern. At New York Air I served as vice president of flight operations, with responsibility for all flight operations, and subsequently as vice president of operations, which included responsibility for maintenance and station operations as well.

I am also an instrument-rated commercial pilot.

At Eastern I report to the company's chief operating officer, and since the beginning of this year have directed a staff of highly experienced former FAA inspectors who serve Eastern in the same way that they formerly served the FAA.

We inspect and audit Eastern for safety and Federal air regulation compliance, and do it in a very deliberate and thorough manner. We do not wait for the FAA to find our discrepancies and order corrections. We find them ourselves. And we have the support of Eastern's senior executives to implement corrective measures.

Since 1978, allegations have been made that airlines, in an effort to remain competitive, have cut corners on safety. We have heard many of those claims repeated here today. My experience, however, tells me that these claims are not true.

In 1978, Congress did not deregulate safety, nor did it deregulate the FAA. In fact, since 1978 the FAA has intensified its surveillance activities over airlines, and the airlines are even more mindful today of their safety obligations.

At Eastern there has been a dramatic increase in the resources devoted to maintenance, safety, and regulatory compliance. For example, in 1987 Eastern will spend over half of a billion dollars for maintenance and engineering, which is a 42 percent increase over 1985 levels. That is not cutting a corner.

Between 1983 and 1987, Eastern's total maintenance cost per flying hour increased from $495 per hour to $656 per hour, the industry's largest maintenance increased expense in that period. That is not cutting a corner.

Maintenance and engineering expenses account for 12.1 percent of Eastern's total operating expenses thus far in 1987, compared to 8.1 percent in 1985, a 50 percent increase. That is not cutting a corner.

With the exception of 1986, Eastern's maintenance work force is higher today than at any time in the last five years. This has occurred despite the fact that the number of airplanes in Eastern's flight has been reduced. That is not cutting a corner.

The value of Eastern's maintenance and engineering inventory has steadily increased, from $370 million in 1984 to $409 million in 1987. That is not cutting a corner.

Eastern anticipates that it will spend 100 percent more on materials and supplies for its maintenance and engineering division in 1987 than it did in 1985. Again, that is not cutting a corner.

These facts exemplify the tremendous commitment Eastern is making to strengthen its maintenance capability and provide the traveling public with the safe product they expect and deserve.

Safety is Eastern's number one priority and, while some of Eastern's unions would have you believe this is not so, Eastern points proudly to its safety record. With its current fleet of 279 aircraft, Eastern operates almost 550,000 flights per year, carrying 42.5 million passengers. In the last 13 years, Eastern has operated 6.2 million flights, carrying over 435 million passengers, with one fatal accident during that period.

While one is too many, Eastern's safety record ranks among the industry's best.

I would point out, however, that the safety scare tactics currently being employed against Eastern, tactics disguised in the thin vein of safety, have seriously affected Eastern's performance. Given the recent Congressional interest in the service provided by carriers to the traveling public, it is important that you be made aware of what Eastern faces in its attempt to provide a safe, reliable product for its customers.

In February of this year, after Eastern advised its unions that it was necessary to restructure labor costs if Eastern were to remain competitive, the pilots refused to enter into any meaningful dialogue. Instead, a major slowdown campaign called "Max Safety" was implemented. This campaign, falsely characterized as a safety awareness program, is nothing more than a classic work-to-the-rule slowdown.

The object: To preserve a pilot's life style developed during the bygone era of regulation, when price competition was virtually unknown and airlines were permitted to pass through increased labor costs to the traveling public.

ALPA described the slowdown as an economic weapon against the company to achieve its desired objectives. Tactics include increased reporting of alleged mechanical problems and refusal to fly aircraft with no valid justification. Exhibits 9 and 10 in my written testimony illustrate the impact which the pilot slowdown has had on Eastern's operations.

Windshield replacements, Exhibit No. 9, are up 72 percent in 1987 over a similar period in 1986, because pilots have been claiming that their vision is obscured. Replacement of certain avionics-related parts, Exhibit No. 10, is up 128 percent in 1987 over the similar period in 1986.

Mr. Chairman, these component turnover rates far exceed anything Eastern has ever experienced, and it is clear that the ALPA slowdown is the direct cause.

One tactic used by pilots is designed to target certain components which happen to be low in Eastern's inventory, thereby maximizing the disruptions to Eastern's schedule. Exhibit 6 is an example of a document circulated by ALPA to show its pilots. It lists 14 components which were known to be low in Eastern's inventory at that time.

I would especially invite your attention to Exhibit 19, which illustrates the total effect of the ALPA slowdown on Eastern's system-wide performance since the introduction of Max Safety.

Another tactic used is the placement of stickers in the cockpit designed to bring attention to the Max Safety campaign and to intimidate pilots who may not be inclined to participate in the slowdown. An example can be found in Exhibit 12.

The FAA has stated that these stickers alone adversely affect safety and has asked Eastern to remove the stickers from the cockpit.

Some of you have undoubtedly received numerous postcards from Eastern pilots citing alleged mechanical discrepancies and operational problems. These postcards have diverted the resources of the Department of Transportation, the FAA, Congressional staffs, and Eastern, wasting taxpayer dollars and company funds to investigate complaints that are specifically designed to make investigations impossible.

In fact, less than ten percent of these cards even mention the two essential elements necessary to conduct an investigation, the occurrence date and the flight number.

In spite of the allegations you have heard here today, Eastern has not and will not take disciplinary action against anyone who incurs a delay or a cancellation for legitimate safety reasons. On the other hand, Eastern will continue to hold its employees accountable for their actions.

Employees who intentionally disregard safety requirements will be disciplined accordingly. Also, employees who disrupt the company's operations under the guise of safety will be held accountable for their actions.

Mr. Chairman, the entire air transportation system is based upon personal accountability, whether it be the signing of a logbook, airworthiness release, a dispatch release, or a training record. Eastern's attempts to inject personal responsibility and accountability into other areas of the company are entirely consistent with this philosophy, and that applies equally to management as well as non-management personnel.

We believe this is absolutely essential if we are to run an efficient, profitable, reliable, and, most of all, safe airline.

Mr. Chairman, I have submitted 30 pages of written testimony and 20 exhibits.[1] I would encourage you and the members of the committee to review that as the opportunity presents itself, and I appreciate the opportunity to testify before this committee. I would be happy to answer any questions you may have.

The CHAIRMAN. Well, Mr. Kolski, they will be included, the entire statement and the exhibits by reference.

Is it your testimony that this is just happening to Eastern, or to all airlines?

Mr. KOLSKI. What?

The CHAIRMAN. The so-called slowdown tactics.

Mr. KOLSKI. I believe it is happening to Eastern Airlines, and it is happening to Eastern Airlines ten years after deregulation. It did not happen when Eastern had an accident. It did not happen when Eastern was imposed a $9.5 million fine. It did not happen before that fine; it did not happen after that fine.

It happened after the company made it known to its pilots that the wage structure at Eastern Airlines and the cost of pilots and other employees was going to have to be lowered if Eastern was going to remain competitive. That is when the Eastern pilots decided to tell the world about safety. It is not a coincidence.

It is a labor-management dispute, thinly guised under a flag or banner called safety.

The CHAIRMAN. Well, and it is not happening with the other airlines? It is happening specifically to Eastern?

Mr. KOLSKI. To my knowledge, sir, that is correct.

The CHAIRMAN. And yet, you just heard Captain Duffy say that it is all airlines, because he came as head of the Air Line Pilots Association.

Mr. KOLSKI. Yes, I heard that.

The CHAIRMAN. And now, with that bell ringing and we are going to have to leave for a vote, it comes down to a question of safety. For example, if I am going to fly a plane in the dark of night, say with bad weather, and one of my generators is gone, I do not believe I would want to fly that plane. Or do you disagree? You think that is all right, to fly with one generator?

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[1] The exhibits are in the Committee files.

Mr. KOLSKI. Not with one; with two. There are three on a 727. With one inoperative, yes, I believe it is okay.

And Mr. Chairman, if it is not okay then why is not ALPA petitioning the FAA, the FOE board, which establishes the master minimum equipment list? When you review a master minimum equipment list, there are minimum equipment list items that the lists say you cannot fly at night without it.

If it is unsafe to fly with a generator inoperative at night, then why, Mr. Chairman, did that airplane fly from that very same city you are going to at night under the command of another captain? Was that captain unsafe? Was that flight unsafe?

You go to the airport an hour before departure. You ask the agent at the ticket counter, is the flight going to be on time? He looks at his watch, he looks in the computer, and he says: It is scheduled to arrive in 15 minutes, and your flight should go on time.

That airplane came from the very city that you are going to. It is turning around and it is going back. You go to the gate, you check your bags. The aircraft arrives. There is a change in the pilots. A new pilot command gets on board 25 minutes before departure, and he now announces that the airplane is unsafe because there is a generator inoperative.

Has Eastern moved those 50 or 90 passengers that came from your very city in an unsafe manner? Was that prior captain unsafe? If he was, then we drastically have to amend the master minimum equipment list.

The CHAIRMAN. Maybe that is the problem, then, because if a pilot tells me—I am not that experienced, but if a pilot tells me the generator is out or he does not want to fly it, particularly in bad weather and everything else of that kind, I am not worried about the schedule and the time and lateness and turn-around and all these other things. You have got me on the ground.

Mr. KOLSKI. Mr. Chairman, in my written testimony I think I have tried to outline what the MEL is and how it applies, and I think I have done it in a little more comprehensive manner than what you heard here earlier today.

There are certain items in the minimum equipment list which the FAA has determined are not necessary for safe flight, and they need not be fixed before the next flight or the flight after that or the flight after that. They are items which the FAA and the airplane manufacturer have determined are excess or extra items, not necessary for the safety of flight.

Senator FORD. I sure would like to discuss this with you a little bit more. There is nothing I like better than getting in the middle of a management-labor flight. You know, that is exactly what this thing has turned out to be. I think you can accuse the pilots of slowdown and I think they can accuse you of spare parts, but you ain't going to win with the flying public saying it is a management-labor dispute.

The pilots are going to win this one, because they are saying that plane is not safe to fly, they do not want to take it off the ground.

And you ask the passengers on that airplane, who do you believe, they are going to believe that fellow in that dark suit up front who has the cap on that has got 30,000 hours.

Mr. KOLSKI. Senator Ford, Eastern Airlines will never direct any employee to fly an airplane that he believes is unsafe. It will never do that.

Senator FORD. Well, you might find another pilot that would say it is safe and he will fly it.

Mr. KOLSKI. Eastern believes, though, that when a pilot exercises his responsibility, just like anybody in this world or this room exercises their responsibility, there is a correlative duty and that is accountability. You cannot have responsibility without accountability.

Senator FORD. Well, you cannot account for anything if you are not able to be there.

Mr. KOLSKI. That is correct.

Senator FORD. I am getting tired of these white knuckles.

The CHAIRMAN. There is no question the pilot has been flying for years. He has flown with the Navy, flown with this exemplary record—I do not believe you are going to get those pilots that I have just listened to to engage in a slowdown.

[The statement and questions follow:]

STATEMENT OF STEPHEN J. KOLSKI, STAFF VICE PRESIDENT AND COUNSEL FOR REGULATORY COMPLIANCE, EASTERN AIR LINES, INC.

INTRODUCTION

Mr. Chairman and Members of the Committee, Eastern appreciates the opportunity to testify before you today on the subject of airline safety. My name is Stephen J. Kolski and I am Eastern's Staff Vice President and Counsel for Regulatory Compliance. I have been with Eastern since January of 1987. Piror to that, I served for seven years as Vice President of Flight Operations and Vice President of Operations for New York Air. Between 1966 and 1980, I served in various positions for National Airlines, including Director of Labor Relations and Staff Vice President of Flight Operations. I am a lawyer and a licensed commercial pilot with an instrument rating and have over 20 years of industry experience on matters relating to safety and FAA regulatory compliance.

The false perception carefully nurtured by airline labor unions is that under deregulation airlines have been cutting back on safety. ALPA has been using safety scare tactics for years, alleging that the margin of air safety is narrowing, that the airlines keep cutting corners to increase profits and that, sooner or later, a tragedy will happen because of it. In his recent testimony before the House Committee on Government Operations, Eastern Captain Don McClure issued a blistering attack on Eastern Air Lines and the industry in general. He even cited the recent tragedy in Detroit as "the harbinger of things to come." I do not intend to dwell on that unfortunate occurrence, but it demonstrates the great lengths ALPA will go to get their point across, even citing accidents which have absolutely nothing to do with the issue at hand.

Mr. Chairman, the Congress did not deregulate safety in 1978 and we believe the record will show that in recent years Eastern has dramatically increased the resources devoted to maintenance, safety and regulatory compliance. Eastern commends the Committee for its leadership in holding these hearings and offers the following to assist the Members in separating the myths from reality:

In 1987 Eastern will spend over half a billion dollars for Maintenance and Engineering (M&E), a 42% increase from 1985 levels;

Eastern's M&E expenditures per available seat mile far exceed the industry average. Between 1983 and 1987 Eastern's total maintenance per flying hour increased from $495.00 to $656.000—the industry's largest maintenance expense increase for that period;

M&E expenditures account for 12.1% of Eastern's total operating expenses thus far in 1987, compared to 8.1% in 1985;

With the exception of 1986, which required additional staff to cope with unusually high, but temporary workload requirements, Eastern's maintenance workforce is higher today than at any time in the last five years.[1] This has occurred in spite of the fact that the number of airplanes in Eastern's fleet has been reduced;

The value of Eastern's Maintenance and Engineering inventory has steadily increased from $370 million in 1984 to $409 million in 1987; and

Eastern anticipates that it will spend $189 million in materials and supplies for its Maintenance and Engineering Division compared to $94.5 million in 1985.

Mr. Chairman, these are the facts, plain and simple. In spite of what others would have you believe, Eastern has made a tremendous commitment to strengthen its overall maintenance capability and we are succeeding in spite of union opposition to many company initiatives and in spite of anti-safety union tactics.

Perhaps the best proof of Eastern's commitment to safety is its safety record. With its current fleet of 279 aircraft, Eastern operates approximately 1,500 daily departures to 132 cities and 26 countries. In 1986 alone, Eastern carried 42.5 million people. Since 1975, Eastern has operated 6.2 million flights, carrying 435.7 million passengers. Eastern experienced one fatal accident in South America during that period, and while that was one too many, Eastern's safety record ranks among the industry's best.

In spite of the media attention and public hysteria over allegedly deteriorating safety, the facts show that the airline industry as a whole has greatly improved safety since deregulation. Airline fatalities in the eight years before deregulation were 3,083. The total between 1979 and 1986 was 1,944, a drop of 37%. Fatalities per 100,000 miles flown dropped from 1.72 in 1978 to 0.92 in 1986. Mr. Chairman, the airlines make six million safe flights every year and yet this fact often gets ignored amid all the criticism. What also gets ignored is that economic deregulation has enabled millions of Americans to afford air transportation. This has actually improved safety because these passengers are, in many cases, using the airlines in lieu of their automobiles, a far more dangerous mode of transportation.

Eastern recognizes the problems of the past and the fact that an FAA-NATI investigation conducted almost two years ago resulted in a substantial number of alleged discrepancies. Eastern has come to grips with and addressed those issues and made dramatic improvements in its safety and compliance programs.

In my testimony, I will describe Eastern's extensive maintenance and emgineering capabilities, its responsibilities as an air carrier operating under the Federal Aviation Regulations, and how Eastern exceeds those requirements. Next, I will discuss specific maintenance and operations initiatives which Eastern has implemented to increase safety. I will then explain Eastern's FAA-approved minimum equipment list (MEL) procedures, describe the ALPA slowdown (purposely disguised in the clothing of safety) and show how the ALPA tactics have adversely affected the company's performance. Finally, I will explain the philosophy behind the company's incentive compensation program and address issues relating to employee discipline.

EASTERN MEETS OR EXCEEDS FAA REQUIREMENTS

As a domestic and flag air carrier operating under Part 121 of the Federal Aviation Regulations (FARs), Eastern must comply with a variety of FAA rules governing maintenance, preventive maintenance and alterations. It must have competent personnel and adequate facilities and equipment, including spare parts, supplies and materials. It must have an organization adequate to perform the work.

Maintenance must be performed in accordance with the company's FAA-approved maintenance program, company and manufacturers' manuals, and the FARs. A separate inspection workforce is required and no person may perform an inspection if that person accomplished any of the work being inspected. A Continuing Analysis and Surveillance Program (CASP) analyzes Eastern's own maintenance procedures, identifying any deficiencies and the corrective action required. As part of its required Reliability Program, Eastern's engineers set performance parameters for all aircraft in the fleet. Continuous monitoring occurs to ensure that those parameters are not exceeded; if they are, the appropriate remedy is identified and engineering orders are issued to the mechanics in the field to take corrective action.

These regulations and others have helped create an unparalleled system of safe and reliable air transportation in the United States. While not to diminish the important role of the FAA in achieving this exemplary safety record, the airlines deserve equal commendation for the role they have played as well. Eastern has many maintenance-related programs which go far beyond the requirements of the FARs and we will continue to reassess and improve our programs.

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[1] Adjusted to reflect the termination of Eastern's contract maintenance program for other carriers.

One example of Eastern's commitment to program enhancement is its automated repeater program. Although 99.3% of all pilot reports of actual or suspected mechanical irregularities are corrected promptly by Eastern's mechanics, Eastern has developed an automated program to address the 0.7% which do not respond to initial troubleshooting and corrective action. The program is designed to identify and repair those discrepancies which recur three times within a ten day period. Data collection was originally performed manually through an examination of logbook entries by pilots and mechanics. Although the manual system still functions in a back-up role, Eastern recently implemented a sophisticated computer program which identifies repeat items based on an analysis of four digit ATA codes which are assigned to all repairs. When a repeat item is identified, the downline maintenance station is automatically alerted so mechanics can take appropriate followup action as soon as possible. Eastern's repeater program has evolved to the point where 94% of the repeat items are promptly repaired without re-entry into the program.

Another example of how Eastern exceeds FAA requirements is in its implementation of FAA Airworthiness Directives (ADs). Earlier this year, Eastern established an AD Review Board to act as the central decision making authority on the implementation of ADs. Eastern requires that the accomplishment of all ADs requiring modifications to airplanes must be signed off by an inspector and certified by a manager. Eastern has fully automated its AD Records System which includes 22 years of AD history and over 550 separate ADs. None of these measures are required by the regulations; yet Eastern believed they were necessary and did not hesitate to spend the money required to implement them.

EASTERN'S MAINTENANCE AND ENGINEERING CAPABILITIES

Eastern's Maintenance and Engineering Staff—Eastern employs 6,335 highly-experienced and dedicated people in its maintenance and engineering workforce. Eastern's 4,556 mechanics average 13 years of experience, maintenance supervisors average 19 years of experience, and maintenance foremen average 16 years of experience.

Eastern employs approximately 150 engineers and associated technical analysts devoted to the development and implementation of programs to improve the safety, reliability, passenger comfort, performance and economics of Eastern's operations. The engineering staff, which includes five FAA Designated Engineering Representatives (DERs), averages over 10 years of industry experience per employee.

Aircraft Overhaul—At its maintenance bases in Miami and Atlanta, Eastern performs virtually all aspects of annual "C" checks and major structural "D" checks. Facilities available for this effort include three wide body aircraft hangar bays and several narrow body bays in Miami, plus one wide body hangar bay and two narrow body bays in Atlanta.

Eastern's overhaul capabilities include extensive mechanical, sheet metal, structural, and wiring checkout and repair. Additional capability includes paint and polish, aircraft jacking and landing gear retraction testing, aircraft weighing, and automated systems testing.

Component and Accessories Shops—Eastern overhauls and repairs the vast majority of its aircraft and engine components. Among Eastern's component shops are those devoted to avionics, electrical components, hydraulics, pneumatics, control surfaces, fabrics, composites and seats. Shop equipment includes many automatic test units for avionics components, composite lay-up and autoclave bonding, extensive hydraulic test stands and environmental test cells.

Engine Overhaul—Eastern has complete repair, restoration and testing capability at its Miami Base Engine Service Center. The Engine Service Center is among the most modern and fully-equipped turbine engine facilities in the world. It includes a complete machine shop with computerized machining and inspection equipment, a weld shop equipped for virtually all welding processes, a fully-equipped heat treating facility, and extensive parts cleaning capability. Engine disassembly and assembly is supported by extensive gantry facilities. A large and modern fuel metering facility produces and tests fuel controls, fuel pumps and related components.

Non-Destructive Testing—Eastern employs the most advanced non-destructive testing techniques in the industry at its major maintenance bases in Miami, Atlanta and Boston. X-ray structural inspections, radioactive isotope inspection of engines, ultrasonic eddy current and dye penetrant inspections are used on a daily basis to assure the integrity of Eastern's aircraft.

Engineering Laboratory—Eastern's Engineering Laboratory provides comprehensive support in chemical, metallurgical and materials engineering. Services include the chemical analysis of fuel, lubricants, metals and non-metallics; instrumental analysis including spectrophotometry and chromatography; physical and mechanical testing for structural analysis, design modifications, and vendor parts qualification and control. This laboratory frequently performs failure analyses for the National Transportation Safety Board (NTSB) and several outside customers.

MAINTENANCE AND ENGINEERING INITIATIVES

Increased Emphasis on Training—Since 1985, Eastern has more than doubled the number of man-hours devoted to training its mechanics. Eastern expects to devote almost 320,000 man-hours to training in 1987 compared to approximately 140,000 in 1985. This year the average Eastern mechanic will spend 30 hours more per year in training than in 1985. Mechanics are tested on all subjects covered in training and classroom attendance is mandatory.

The instruction encompasses all aspects of aircraft maintenance from general familiarization courses to those specializing in a single subject, such as engine boroscope inspection. Because of the need to ensure accurate records, mechanics are instructed on how to properly fill out aircraft logbooks and other required records after performing maintenance. Many of the courses are attended by FAA inspectors.

In addition, Eastern has undertaken a variety of programs designed to improve the performance of its maintenance workforce.

Airworthiness Directive Reconfirmation—Following the 1985-1986 FAA inspection of Eastern, the company conducted an unprecedented internal inspection of its entire fleet, reconfirming compliance with 239 separate FAA Airworthiness Directives (AD) issues during the past 20 years.

This inspection encompassed nearly 300,000 separate units, consumed 140,000 man hours and cost $15 million. Eastern believes it was the most comprehensive inspection ever conducted by an airline. Eastern also separately inspected all parts affected by an AD, both on the aircraft and in inventory. As a result of these inspections, Eastern made numerous recommendations to the FAA and industry which will lead to a higher level of safety for all operators.

Organizational Improvements—Eastern has created a new independent regulatory compliance group, known as Regulatory Liaison and Operational Review (RLOR). Headed by an attorney with over 20 years of experience in air carrier operations and staffed with former FAA air carrier inspectors, this group has unlimited authority to inspect any part of the airline at any time for any purpose. It reports directly to Eastern's Chief Operating Officer.

Eastern has greatly expanded the Quality Assurance function by placing it under a newly-created Procedural Compliance Department. The department is headed by an attorney who holds an Airframe and Powerplant (A&P) certificate from the FAA and who has 20 years of experience in airline maintenance, quality control and regulatory compliance matters. The Department conducts extensive audits of maintenance facilities to ensure they are in full compliance with the FARs and Eastern's own procedures. To further strengthen its role, Eastern now requires Quality Assurance approval for any changes in its Maintenance and Engineering programs. A total of 38 positions have recently been added, which represents a staffing increase of 25 percent.

Eastern has not hesitated to add other personnel where justified to improve its maintenance effectiveness. In the Accessories Service Center (ASC), which is responsible for the overhaul, repair and alteration of all line replaceable units, Eastern has increased the number of man-hours of training by 16 percent over 1986 levels. Eastern has increased Manager and Technical Staffing in the ASC by 25 percent. The Shop Engineering Staff has been increased by 60 percent to improve tooling capabilities and 54 mechanics positions were recently added to respond to the increase in parts turnover caused by the pilots' slowdown.

In the Engine Service Center, 56 additional positions were created since January of 1986. Eastern has also hired more technical supervisors to assist line maintenance and monitor engine build standards and testing criteria.

As part of its overall program to emphasize the importance of accurate recordkeeping, Eastern has hired additional record analysts in the Engine Service Center and in its Reliability Office, the latter to ensure that the information which forms the basis for Eastern's fleet reliability program is verified before being input into the system.

Engine Performance Improvements—Eastern's increased financial commitment to maintenance has paid off. In June of this year, Eastern has over 30 spare engines on hand. This means that when engines are overhauled or repaired, Eastern can replace the engine without taking the airplane out of service for an extended period or leasing a replacement engine.

After overhaul, engines must meet specific performance parameters in the test cell prior to their being installed on the aircraft. Eastern has dramatically reduced the number of engines rejected in the test cell, demonstrating that the quality of Eastern's engine repairs has substantially improved. This is further reflected in Eastern's in-flight engine shut down rate, which is lower thus far in 1987 than at any time in the last five years.

FLIGHT OPERATIONS INITIATIVES

System Control—Eastern has implemented a variety of programs in its Flight Operations Division which underscores its commitment to safety and compliance. It has hired additional dispatchers and improved the quality of weather training they receive. Eastern spent $8 million to purchase ACARS (Aeronautical Communication and Report System) which, when fully implemented, will reduce clerical duties for dispatchers, reduce crew workload and provide direct access to weather data by flight crews. Eastern also leases a state-of-the-art Kavouras System, which provides pilots with real time weather radar forecasting and monitoring.

Pilot Training—Eastern has been one of the industry leaders in pilot training and recently implemented a Cockpit Resource Management Training Program to improve flight crews coordination and communication within the cockpit. The program, which is being administered to Eastern's check airmen and which will be given to line pilots in 1988, puts crewmembers in "real life" situations and emphasizes the need for and importance of shared responsibility within the cockpit for all flight operations tasks. Cockpit Resource Management training has received the endorsement of the FAA and the NTSB.

To enhance the coordination of training with every day line operations and to ensure operational standardization across the entire fleet, Eastern has combined its Flight Operations Training and Flight Standards under one director, with a fleet manager assigned for each aircraft type. Each fleet manager is responsible for both training and operational standards for his aircraft.

In addition to these improvements, Eastern has established the Flight Operations Development Program to develop enhancements to flight and ground training programs. New methods, including the use of computer-based training and interactive video, will be implemented subject to the FAA's approval.

Since the mid-1970s, Eastern has been training its crews in wind shear detection, avoidance and recovery. Through a series of computer models which are based on actual encounters with wind shear, Eastern's pilots receive hands-on simulator experience in dealing with this potentially lethal phenomenon. This training has been so valuable that Eastern credits it with having helped its pilots recover from at least two separate encounters with severe wind shear; one on approach and one during a go-around procedure.

Pilot Qualifications—ALPA has stated that the newly hired pilots of today are inexperienced, compared with those hired in the past and that the FAA should increase the minimum qualifications for airline transport pilot certificates. Eastern does not agree. Eastern requires its newly hired pilots to have 1,200 hours of total flight experience; 500 hours must be in turbine-powered aircraft (either as pilot-in-command or first officer) and 200 hours must be as pilot-in-command in multi-engine aircraft or in a high performance single engine jet fighter. Eastern prefers that its new hires have completed their flight engineer's written test and that they have a college degree. Interestingly, Jack Bavis, an experienced Eastern pilot and Master Executive Counsel (MEC) Chairman of Eastern's ALPA unit, would not be hired by Eastern today since he had only accumulated 805 total flight hours at the time he was hired. Eastern does not believe Mr. Bavis is an unsafe pilot now, or that he was ever unsafe, but finds it ironic that ALPA would seek to increase minimum pilot requirements which many of their own prominent members would not have met when they were hired.

MINIMUM EQUIPMENT LIST (MEL) PROCEDURES AND POLICIES

FAA and company safety regulations require that equipment with a suspected malfunction be written-up, *i.e.,* be reported. Each plane has a maintenance log book, in which items needing repair are to be noted. Before a plane can depart, any items written-up in the log book must be "cleared" by a licensed mechanic. An item may be cleared by its repair or replacement, or when authorized by the company's maintenance program, by scheduling its repair for a later time.

In the ideal world, all airplane systems would always function perfectly and every item that needed repair would be fixed before further flight. The FAA has long recognized that this standard is impossible to attain and airlines are permitted by the FAA to defer maintenance in accordance with an FAA-approved minimum equipment list (MEL) or the company's approved maintenance program.

The minimum equipment list is based on the philosophy that some redundant aircraft components or systems need not be operative to ensure a safe flight. In many cases, this is because the airlines have purchased equipment over and above that required by the regulations, such as a third altimeter (only two are required) or a third radio. In Eastern's case, this equipment was purchased to provide an extra margin of dispatch reliability so that the failure of a particular component would not take the airplane out of service.

There are essentially four kinds of minimum equipment items. The first type are those which must be fixed before further flight. For example, the MEL requires a functioning flight deck interphone system at all times. If it should fail, it must be repaired before dispatching the next flight.

The second kind are those where it is permissible to operate the airplane with a particular component inoperative, such as a generator or an autopilot system. The FAA does not specify when or where these items must be repaired, but allows the airline to delay the repair without disrupting its schedule or the travelling public. Some MELS of this type impose an operational restriction on the airline if the component is inoperative. An example would be an inoperative air conditioning pack which reqiures an altitude restriction, thereby causing additional fuel consumption.

A third type of MEL falls into a hybrid category depending on the conditions under which the flight will operate. For example, weather radar must be functional if a flight is going to be dispatched into an area with known or forecasted thunderstorms; otherwise the aircraft may be flown without it. Similarly, landing lights must be operative at night, but the repair can be deferred in accordance with the MEL if the airplane will only be flown during the day.

The fourth kind of MEL item is one which may be inoperative for a limited time only, such as a cockpit voice recorder, flight data recorder or ground proximity warning system. The FAA requires that, in these cases, the airplane "may continue the flight or series of flights but shall not depart an airport where repairs or replacements can be made." The vast majority of MEL items do not fall into this category; however, those that do are given the highest priority.

The interpretation of this phrase has been left largely to the various local FAA offices and as a result, the airlines have developed somewhat different procedures for addressing it. Although some flexibility in the MEL policy is necessary in order to account for differences in the carriers' operations, the FAA has correctly recognized that national guidance is necessary and we look forward to participating in developing that policy.

THE ALPA SLOWDOWN

During the first quarter of 1987, the leadership of ALPA implemented a major slowdown campaign against Eastern. Falsely characterized as a safety awareness program, it is in reality a classic work-to-the-rule job slowdown designed to preserve a pilot lifestyle developed during the by-gone era of regulation when price competition was virtually unknown and airlines were permitted to pass through increased labor costs to the travelling public. Designed, in ALPA's own words, "as an economic weapon against the company," the slowdown employs a variety of tactics to achieve desired union objectives, including increased reporting of alleged mechanical problems, refusals to fly aircraft with no valid justification for such refusals, and picketing and leafletting. ALPA's own newsletter shows that its Executive Committee has initially budgeted $2.5 million to help fund the job actions against Eastern. (Appendix 1). It has been carefully planned, as demonstrated by ALPA's February 11, 1987 survey of Eastern pilots. The questionnaire asked Eastern pilots "would you support a job action at this time, such as a *Fly by the book . . .* " (Appendix 2).

ALPA communicates with Eastern pilots through a cartoon character, "Max Safety." Max Safety advises pilots to "Live by the Rules," "Fly by the Book" and "Take the Time to Be Sure." (Appendix 3). These messages are the time honored and well understood code phrases encouraging a work slowdown. The format of the slowdown follows a pattern established by ALPA as early as 1968, as is more fully described in an ALPA document entitled "The Slow-Down As A Negotiating Tool." (Appendix 4). The document described the slowdown as follows: "The slowdown, call it what you will—'withdrawal of enthusiasm,' 'lay aside enthusiasm,' '*safety program,*' 'withdrawal of the spirit of cooperation'." Mr. Chairman, the airline industry has seen these tactics before and so have the courts. In *Texas International Airlines, Inc. v. Air Line Pilots Association International,* 518 F.Supp. 203 (S.D.Tex. 1981), the court had occasion to review ALPA's tactic of writing up mechanical defects in the name of safety. The court found that ALPA's actions were motivated, not by genuine safety concerns, but by a desire to disrupt carrier operations and pressure the airline to agree to ALPA's bargaining proposals.

ALPA has distributed 250,000 postcards to Eastern's pilots with instructions to write up alleged maintenance discrepancies on the cards and forward them to the FAA, DOT, NTSB and Members of Congress. The cards are specifically designed to make it impossible to determine whether a particular write-up is valid. In fact, less than 10% even mention the two essential elements needed to conduct an investigation—the date of the occurrence and the flight number. Although Eastern and the FAA are devoting substantial resources to identify those few which can be investigated, the postcard campaign has diverted resources away from more legitimate safety-related activities.

Through mass mailings similar to one I have attached to my testimony and prerecorded weekly phone messages, ALPA has encouraged pilots to write up items in the logbook (Appendix 5), stressing those which are low in inventory so that the potential for schedule disruptions is greatest. (Appendix 6).

ALPA explains its tactic of the weekly strategy as follows (Appendix 7):

"In order to demonstrate to management that the Max Safety campaign is working and has the hearty endorsement of all pilots, I would like to start sending a series of clear, unmistakable signals to the powers that be. The simplest and most effective way of doing that is by selecting *one* of the 72 tips I sent to everybody on the four safety checklists and emphasizing it for a period of time. At just about the time we demonstrate that we're all working together on that one item, I'll switch signals, select another item from the checklists, and send you all a postcard with the effective dates for featuring that item."

The first tactic-of-the-week signaled by ALPA was to use extra time when leaving the gate and taxiing to and from the gate in order to build delay into Eastern's flight schedules. The next tactic-of-the-week concerned flying at lower altitudes in order to burn more fuel. A copy of ALPA's postcard emphasizing that more fuel is consumed at lower altitudes is attached as Appendix 8. The results of these tactics should not surprise anyone.

Eastern's windshield replacements are up 72% in 1987 over a similar period in 1986 because pilots have been claiming that their vision is obscured, a subjective complaint which is often difficult to validate. (Appendix 9). Nevertheless, if a pilot writes in the logbook that his vision is obscured, Eastern changes the windshield. Our replacement of certain avionics-related parts is up 128% in 1987 over 1986 levels. (Appendix 10). Mr. Chairman, these component turnover rates far exceed anything Eastern has ever experienced and it is clear that the ALPA slowdown is the direct cause.

Another significant part of the slowdown is the placement of juvenile stickers in the cockpit with anti-management slogans such as "Warning: Inflammatory Sticker" or "Had Enough Yet." We have reproduced a few of these stickers at the end of our testimony for your review. (Appendix 3). Placement of these stickers in the cockpit is a violation of the FARs and they can adversely affect safety by disrupting a pilot's instrument scan. For this reason, the FAA has stated that the stickers impose a "negative aspect on safety" and asked Eastern's management to have the stickers removed from the cockpit. (Appendix 11). Valuable mechanics' work hours have been devoted to the removal of these stickers on a nightly basis.

Although not all of Eastern's pilots are participants in the slowdown, ALPA ensures that those who do not agree with these disruptive tactics are subject to ridicule and peer pressure. A particularly good example is the attached flyer which lists the names of certain non-participating pilots and makes the statement "Don't Be a Pussy Pilot." (Appendix 12).

WHY A SLOWDOWN NOW?

ALPA would have you believe that Max Safety is a program designed to improve safety at Eastern. While this is an admirable ideal, Eastern wonders why it was started in early 1987. Deregulation came to the industry in 1978 and many of the ALPA allegations about the eroding margin of safety started at that time. Where was Max then or in the 10 years since? Why did he finally surface? The answer lies in the fact that Max Safety, like so many other ALPA safety scare tactics of prior years, is really an ALPA response to a labor management dispute over wages, fringe benefits and working conditions.

In early 1987, Eastern advised its unions that it was necessary for Eastern to restructure its labor costs if Eastern were to remain competitive. The pilots at Eastern refused to enter into meaningful dialogue aimed at producing this result and instead introduced Max Safety.

I strongly suspect that if Eastern were today to announce that it no longer desired its pilots to restructure pilot labor costs, Max would disappear. Why else would Max ask "Had Enough Yet?"

EFFECTS OF THE SLOWDOWN

In spite of the union's tactics, Eastern has managed to serve the travelling public safely and efficiently during this period. Nevertheless, it has not been without considerable difficulty.

At those stations where Eastern does not employ its own mechanics, the rate at which pilots are writing minimum equipment items in the logbook has increased nearly eight fold since December of 1986. (Appendix 13).

At airports where Eastern has maintenance facilities, it has its own maintenance staff and spare parts. At airports where Eastern does not have a maintenance staff, it must send in its own mechanics or contract with other airlines, or aircraft maintenance contractors to service its planes. Spare parts may not be available at non-maintenance airports and must be flown in. Forcing noncritical items to be checked at non-maintenance airports, instead of permitting them to be checked at maintenance airports, greatly increases the chances flights will be delayed or cancelled.

Eastern's mechanical cancellation rate, which reached an 11 month low in April of this year, started to increase when the slowdown started. (Appendix 14). The same was true for the combined delay and cancellation rate attributable to mechanical reasons. (Appendix 15). What is particularly frustrating is that Eastern had been steadily improving its overall performance in a variety of areas, only to see some of the gains eroded as a direct result of the slowdown.

For example, between March 1986 and April 1987, Eastern reduced the number of MELs open five days or more by 60 percent. (Appendix 16). Similarly, Eastern reduced the daily average number of open MELs by 30% between January 1986 and January 1987. In January and February of 1987, before the slowdown started, Eastern was opening and closing approximately the same number of minimum equipment items as it had during the same period in 1986. But, in March, when the slowdown began in earnest, the numbers increased dramatically and in May of this year, Eastern opened and closed approximately 25% more MEL items than it had the year before. (Appendices 17 and 18).

Mr. Chairman and Members of the Committee, this is not a coincidence, but a calculated attempt by ALPA to inflict economic harm on the company. (Appendix 19). Eastern is responding to these tactics by redoubling its efforts to reduce the number of open maintenance items. Today, Eastern's MEL count is lower than at any time in the last two years and we will strive to get it even lower, even in the face of this disruptive activity.

One thing is certain; Eastern would have fewer open maintenance items today if employees did not have to remove ALPA stickers from cockpits, investigate postcard complaints designed only to waste FAA and company resources and troubleshoot alleged malfunctions not in need of repair.

INCENTIVE COMPENSATION PROGRAM AND EMPLOYEE DISCIPLINE

Eastern's incentive compensation program has been the subject of recent union-generated media attention and I would like to set the record straight about who is covered by it, why its exists and how it works to improve employee productivity and increase safety.

First, it does not apply to Eastern's union employees, but to management and non-union personnel including maintenance supervisors, reservations agents and ticket agents.

The incentive compensation program exists at Eastern for the same reason it is gaining popularity elsewhere—employees who meet or exceed performance goals and who demonstrate initiative should be rewarded for their efforts. For example, by rewarding a maintenance supervisor for reducing mechanical delays, the incentive program responds to the concerns of this Committee and the Congress for better on-time performance. This radical notion—that people should be rewarded for outstanding work (or held accountable for poor performance)—is being criticized by the unions as anti-safety.

Nothing could be further from the truth. Eastern believes that incentives are pro-safety. For example, by rewarding a maintenance supervisor for clearing open MEL items, preventing ground handling incidents or on-the-job injuries, Eastern encourages him to be more productive which, in the process, enhances safety.

Eastern has not and will not take disciplinary action against anyone who incurs a delay or a cancellation for legitimate safety reasons. But, Eastern must hold its employees accountable for their actions. You are accountable to your constituents; your staff is accountable to you and I am accountable to Joe Leonard and Phil Bakes, Eastern's Chief Operating Officer and Chief Executive Officer. Why should our rank and file employees be any different? If a decision is a correct one, then the employee will be complimented. However, if a pilot strands 150 passengers by refusing to fly an airplane without justification (as one did recently because a rear section of the windshield was allegedly obscured when in fact it was measured as within tolerance), he should be disciplined. If a mechanic signs off a repair as having been accomplished when in fact it was not, he should be disciplined.

However, it is important to put the discipline issue in perspective. ALPA frequently alleges harassment or cites management pressure to fly airplanes when they should not be flown. The allegation is simply not supported by the facts. In the past eight months, Eastern has suspended four captains without pay for making poor decisions in the cockpit. That is four incidents out of 360,000 flights. During the same period, another 50 pilots were counselled; in other words, their decisions were *questioned* by management. Does this sound like harassment? What would the members of this Committee do if one of your staff members decided, at the last minute, not to prepare an amendment you had requested for floor action—on the grounds that he just did not agree with your position? Chances are, you would at least talk with the individual; perhaps, you would do more. The point is that management has both the right and the responsibility to question the decisions of its employees.

Mr. Chairman, the entire air transportation system is based on personal accountability—whether it be signing a logbook, an airworthiness release, a dispatch release, or a training record. Eastern's attempts to inject personal responsibility and accountability into other areas of the company are entirely consistent with this philosophy. We believe they are absolutely essential if we are to run an efficient, profitable, and most of all, a safe airline.

In a recent report prepared by an FAA inspection team on the operations of one of the major carriers, the following observation was made:

"However, the team observed instances of . . . lapses of discipline in cockpits. . . . The presence of these behaviors is primarily due to a lack of clear cut, definitive guidance from those responsible for developing and standardizing cockpit procedures. . . . [M]anagement has maintained a policy of delegating the maximum degree of responsibility and discretion to its crewmembers . . . However, in an increasingly complex and stressful environment the limit of this policy appears to have been reached."

Mr. Chairman, I appreciate the opportunity to testify before the Committee and would be happy to answer any questions which you or the other Members may have.

QUESTIONS OF THE CHAIRMAN AND THE ANSWERS

Question 1. Last year, Eastern was found to have violated 78,000 FAA operations and maintenance rules. How was it that there were so many violations by a single carrier? What steps have been taken by Eastern to ensure that these violations will not again occur?

Response. The $9.5 million civil penalty assessed against Eastern was based on activities which occurred a year or more prior to the Texas Air Corporation's acquisition of Eastern in November of 1986. Shortly after the acquisition, Eastern determined that the company's interests would be best served by agreeing to pay the $9.5 million fine so it could get on with the business of running the airline and by taking positive steps to ensure that similar problems did not recur.

The majority of alleged violations involved an increase in the time intervals between "C" checks on DC-9 and B-727 aircraft. The FAA contended that Eastern failed to properly document the justification for changing its "C" check intervals. Although Eastern believed it had accomplished the required analysis, the FAA concluded there was inadequate documentation to support the change in maintenance intervals; not that changing the intervals was unsafe. In fact, since that time the FAA has allowed Eastern to increase its "C" check intervals.

The FAA counted each of the 48,000 flights conducted by Eastern with affected aircraft during this period and used this as the basis for determining the total number of alleged violations. Other examples of multiple violations stemming from a single set of facts made up the vast majority of the remaining allegations.

You also inquired about Eastern's response to the FAA's inspection. I am happy to resport that the company's response was swift and direct. As I pointed out in my written testimony, Eastern made major improvements in its continuing analysis and surveillance program, which helps ensure compliance with FARs. Also, Eastern increased the number and frequency of internal audits of our safety procedures. Additionally, Eastern created a unique organization called Regulatory Liaison and Operational Review (RLOR), which is comprised of former FAA inspectors who have plenary authority to inspect all aspects of Eastern's maintenance and operations programs. RLOR reports directly to the Chief Operating Officer of the company.

Eastern also undertook a massive Airworthiness Directive (AD) reconformation program, which resulted in the verification of over 239 separate ADs in a twelve month period. Eastern automated its airworthiness directive compliance system to improve the accuracy of its AD records and to enhance its ability to retrieve information on the status of all pending ADs. We established an AD-related issue. Eastern is probably the only major airline that requires that all AD work performed by a mechanic be signed off by an inspector and certified by a manager.

As I testified at the hearing, Eastern will commit more than 42% more money to maintenance and engineering in 1987 than it did in 1985, even though our fleet size has been reduced. Just as importantly, Eastern has more than doubled the amount of training given to its mechanics since 1985. In sum, Eastern has made a major commitment to increase safety; not only in dollars, but in new programs and procedures to ensure that the events of the past are not repeated.

Question 2. Last week Braniff and TWA were assessed fines of $512,000 and $225,000, respectfully, by the FAA. Given the fact that these violations continue to occur, doesn't this mean that the airlines are not complying with FAA operations and maintenance rules? Does it mean that the safety of the traveling public is being compromised?

Response. I am not familiar with the specifics of the Braniff and TWA fines. I can state, however, that FAA penalities do not necessarily indicate poor maintenance or that the safety of the traveling public has been compromised. There are literally thousands of FARs, and airline employees make thousands of decisions each day applying these FARs. Almost all of these decisions are correct, but the system is not perfect. Although fines are assessed against a company, they usually result from poor decisions by individual employees. Sometimes an increased emphasis on training is needed in a particular area. Sometimes a violation is committed because someone just made a mistake.

In recent years, the FAA has dramatically increased its inspection activity. In depth inspections of a major airline can last as long as two to three months, often involving 15 to 20 different inspectors. Under these circumstances, no airline could undergo an in-depth inspection of its maintenence or operations activities without the FAA finding some kind of discrepancy. Often the FAA and the carrier simply disagree on the interpretation of a rule. Sometimes the paperwork or documentation is in the wrong form or place. In short, you have to look at the individual allegations or discrepancies to determine whether a violation is serious.

It is important to remember that despite the FAA's imposition of fines, the agency continues to certify the safety of the airlines it is inspecting. If significant problems were suspected, the FAA can and has imposed more drastic action which can include the grounding of a carrier of a portion of its fleet. Moreover, the imposition of penalties, whether justified or not, does show that the FAA is "on the beat." Although we do not think that fines are the best way to ensure compliance, we welcome the FAA's oversight and assistance.

Question 3. How do we ensure that the airlines comply with FAA operation and maintenance rules?

Response. Initially, I would like to point out that it is in the interest of every airline to comply with FAA regulations, regardless of whether the FAA monitors the situation or ever imposes a fine. No airline can operate without safety being its number one priority. The public demands it and we must demand it of ourselves. Nothing can hurt an airline more than an accident or a reputation of being unsafe. We cannot survive economically unless our planes are airworthy, and the FARs help to ensure that they are. Eastern has always made safety its number one priority. It is an economic imperative.

Some things could be done to ensure better compliance with the FARs. The FAA plays a vital role in this area, but it is hindered in several ways. The FAA must develop clearer guidelines and uniform interpretations of rules so the airlines know what is expected of them. Too often, airlines are faced with an interpretation in one region that is materially different from the interpretation of another. A prime example is the interpretation of the Minimum Equipment List (MEL). Different FAA regions have different requirements and the airlines often get caught in the middle. The FAA is just beginning to address this problem.

We could also benefit from better trained FAA inspectors with more air carrier experience. There has been a large increase in the number of inspectors lately, but the quality has been diluted. Many inspectors now enter responsible positions with little or no experience or training in the complex equipment and procedures of major air carriers. This may improve over time, but for now it is a problem.

Most importantly, the FAA and air carriers should continue to become less adversarial and more cooperative. Complying with the FARs and maintaining the advanced equipment of today's fleets is not a simple task. We would like to see the FAA become more of a "coach" in assisting the airlines, rather than a "cop"—policing their activities. Of course, the FAA must have powers of enforcement. But it would be more productive if the system encouraged air carriers to bring questions and potential problems to the FAA's attention without the constant fear of reprisal. In the many areas where the FAA and the airlines do cooperate already, the results have benefitted everyone. Mr. McArtor has recognized that safety cannot be "inspected" into the system. He has expressed his desire to encourage internal vigilance and cooperation, and not to rely as heavily on the imposition of penalties. We hope that the FAA will move in this direction.

At Eastern, we depend on an extensive network of our own procedures, controls and internal audits to ensure compliance. As I mentioned earlier, Eastern has greatly expanded its quality assurance and procedural compliance departments. We have redoubled our efforts to police ourselves. We have over 150 management employees whose only job is to ensure compliance, and have recently created 38 new positions in this area. In addition, in RLOR we have an independent group of former FAA inspectors whose sole task is to seek out discrepancies and make them known to top management. We welcome FAA involvement in this oversight. But it ought to be positive involvement that augments our own efforts in a spirit of cooperation.

The CHAIRMAN. But in any event, let me hear Mr. Young. Let me hear from you, sir.

STATEMENT OF DON YOUNG, PRESIDENT, SOUTHERN JERSEY AIRWAYS

Mr. YOUNG. Yes, sir. Thank you very much for the opportunity——

The CHAIRMAN. Can you summarize it, and you, Mr. Thornton? I can tell you now that the fifth bell has rung and we are going to have to go. Do you have a minute statement or so you want to summarize?

Mr. YOUNG. Yes, sir. I am here representing a regional airline, and I can tell you that the things that are going on with the regionals right now, everything is going real good.

We do not need regulation, we do not need re-regulation. Our safety record has improved six times over the past ten years. There have been continuous maintenance programs put into effect by the FAA.

Forty-two percent of the people that we fly, our passengers today, are being flown under Part 121 regulations, and we have been the fastest growing segment of the aviation industry, but I believe that we are pretty happy with the system the way it is working today.

We want you to spend more money on nav aids and on airport improvements and capacity improvements. And other than that, things are going pretty well.

[The statement and questions follow:]

STATEMENT OF DON YOUNG, PRESIDENT, SOUTHERN JERSEY AIRWAYS

Mr. Chairman, I am Don Young, President of Southern Jersey Airways in Atlantic City, New Jersey. I appreciate the opportunity to join this panel today to discuss my perceptions of the effect of deregulation on regional air carriers.

Southern Jersey Airways is affiliated with USAir as an Allegheny Commuter, but we are independently owned and operated. We currently operate seven 19 seat deHavilland Twin Otters and three 50 seat deHavilland Dash 7's. Southern Jersey has been in scheduled service since 1970.

FAA REGULATIONS GOVERNING THE REGIONAL AIR CARRIERS

Coincident with deregulation, the FAA significantly upgraded the regulatory structure under which the commuters operate.

The FAA divides its regulation of commercial operations into two sets of rules, Part 135, which governs aircraft seating 30 passengers or less, and Part 121, which governs aircraft seating 31 passengers or more. Within Part 135, there are significant regulatory differences between the standards applied to scheduled operations (regional airlines) and the on-demand charters (air taxis).

In my own airlines, therefore, I use two different sets of operating rules, Part 135 for the Twin Otters and Part 121 for the Dash 7's. While the commuter industry has traditionally been thought of as the "Part 135 carriers", in fact, nearly 42% of our passengers are carried in aircraft flying under the same rules as the major carriers, Part 121.

Through rulemaking over the past 10 years, the FAA has phased out the significant distinctions between the rules governing commuter and major airlines operations. Part 135 and Part 121 together form a continuous regulation, with additional operations, maintenance, performance and equipment requirements phasing in as appropriate to increasing size and complexity. Under Part 135, all aircraft seating 10 or more passengers (which carry 95 percent of all industry traffic) must be maintained according to a "continuous airworthiness maintenance program" under rules that are virtually identical to Part 121 maintenance rules. Most commuters, thus, comply with the same maintenance procedures, recordkeeping, and aircraft and systems reliability programs as do the major airlines.

DEREGULATION—THE EFFECTS ON THE REGIONALS

The effects of a deregulated environment on the regional airline industry have been similar to, but even more pronounced than the effects on the major carriers. The opportunities for growth have been tremendous. Our segment of the industry carried approximately 12 million passengers in 1978, we will carry about 30 million this year. With greater opportunity came greater competition. The Regional Airline Association listed 258 operating commuter carriers in 1978; fewer than 180 remain today. The top 50 companies carried almost 90% of the traffic last year. Probably the most dramatic development has been the increase in marketing, or code-sharing agreements with major carriers. At the end of the last year, 43 out of the top 50 carriers shared the code of a major airline. The nature of those relationships varied from outright ownership by the major carriers to mere marketing agreements between totally independent entities.

While the shape of the regional airline industry under deregulation is still far from fully defined, it is clear that safety has not suffered. The accident rates for the Part 135 scheduled carriers have improved every year except one since 1978. The rate of accidents per 100,000 departures for the Part 135 carriers was almost six times better in 1986 than in 1978. There is statistically almost no difference between the accident rates of the regionals who operate under Part 121 and that of the major carriers, who operate under the same rules.

There are several reasons why the safety record of the commuters has improved under deregulation. Economic growth has enabled the carriers to purchase more modern, state of the art equipment. The industry welcomed and encouraged the FAA regulatory initiatives that were instituted at the same time economic regulation was decreased. Certainly the upgrade in Part 135 standards, which took place at the beginning of deregulation, has been effective. So too has the more intense and sophisticated FAA scrutiny of the regionals, as well as the FAA's effort to standardize enforcement practices on a national level.

RECOMMENDED IMPROVEMENTS

There are still many things the Congress and the FAA could do to help improve the safety and efficiency of the system, particularly as it relates to the regional carriers:

1. More funding for safety improvements to small airports, including improved radar coverage and precision approach aids.
2. More use of the Trust Fund money to improve access to hub airports, through construction of more runways and precision approach aids to alternate runways.
3. Continued support for the expedited implementation of the NAS plan.

We are carrying out our own programs to improve safety. We are, for examle, working with the FAA to enable us to use simulators or advanced training devices for training our pilots. We will work with them to ensure that the appropriate midair collision avoidance equipment is installed on our aircraft. Safety has always been the first priority of my airline, and I will continue to take every step necessary to ensure that it remains the first priority.

REREGULATION IS NOT THE ANSWER

Neither the regional airline industry nor its customers need a return to a regulated environment. Experience has shown that regulation of fares and routes only raises ticket prices for everyone. We do not need new reporting requirements to tell the government if we operate on time, when our survival in a competitive world already requires our best effort in that area. Unlike the major carriers, we compete in large part against the automobile. If we cannot save our passengers time and aggravation, they will drive their car next time. DOT, in its consumer protection rulemaking, recognized that detailed new government reports on small airline performance would do nothing for anyone except raise the cost of our operations, and thus, our fares, and we urge you to follow that logic.

I thank you for your kind attention and I would be happy to answer any questions you might have.

SOUTHERN JERSEY AIRWAYS, Inc.
OPERATORS OF ALLEGHENY COMMUTER
BADER FIELD AIRPORT
ATLANTIC CITY, NEW JERSEY 08401 / (609) 348-4600

October 30, 1987

The Honorable Ernest F. Hollings
Chairman
Senate Committee on Commerce,
Science and Transportation
Washington, D.C. 20510-6125

Dear Chairman Hollings:

The following are my responses to your follow-up questions regarding Airline Safety and Re-regulation.

1. Q. You stated in your testimony that Southern Jersey Airways is affiliated with USAir. Who establishes your procedures for maintenance? Do you perform your own maintenance?

   A. We at Southern Jersey perform our own maintenance in conformance with FAA rules, up to and including overhaul of engines. Our Director of Maintenance is responsible for our maintenance procedures. Although we operate both Part 121 and Part 135 aircraft, our maintenance is essentially conducted pursuant to the Part 121 standards.

2. Q. When was the last time that FAA safety inspectors made an inspection of your airline? Have they made regular maintenance inspections?

   A. FAA inspectors regularly visit Southern Jersey Airways. Our Principal Maintenance Inspector from Philadelphia was here last week. Although we have not had an intense FAA team inspection recently, we did contract for a commercial internal safety audit. We would advocate more safety inspectors for FAA, particularly since it would speed up our ability to get approvals for changes to our operations and maintenance manuals.

3. Q. In his testimony, ALPA President Henry Duffy stated that pilot turnover in the commuter airline industry annually approaches 30-50 percent. Have you experienced turnover of this magnitude? How have you maintained pilot staffing with some level of experience?

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A. Yes, we have experienced a 30-50 percent pilot turnover rate in recent months. We continually search for experienced deHavilland Twin Otter pilots to replace those who leave, as well as maintaining a very intensive, and expensive, training program.

4. / Q. You discussed how Southern Jersey and many commuters operate under both Part 135 FAA rules, and Part 121 rules. What are the major differences between the two sets of FAA rules? Is there any reason why commuters and major airlines should continue to be subject to different FAA standards?

A. The major difference between Part 121 and Part 135 operating rules can be summarized as follows:

a. Airplane Requirements
Part 121 requires airplanes to be certificated under the transport category rules which provide more redundancy of systems and more stringent standards of performance.

b. Equipment Requirements
Part 121 requires operative Flight Data Recorders, Ground Proximity Warning System and Cockpit Voice Recorders and Part 135 does not.

c. Dispatch
Part 121 requires a dispatch system and FAA certificate dispatchers to control and monitor flights. Part 135 only requires a flight locating system.

d. Communication
Part 121 requires a communication system that provides dispatch to airplane communication capability.

e. Two Pilot Requirements
Part 121 requires two (2) pilot crewmembers for all flights. Part 135 permits a single pilot for operations with airplanes seating 9 or less passengers.

f. Flight Time and Rest Requirements
Part 121 Flight Time and Rest Requirements limitations are more restrictive than the limitation for Part 135.

g. Training
Part 121 training rules requires minimum programmed hours of training for both ground and flight training. Part 135 requires training to proficiency. Part 121 requires operating experience with a check airman for first officers and flight attendants and Part 135 does not.

Commuter and major airlines can operate under the same training and maintenance rules for airplanes with 10 or more passenger seats. RAA is working with FAA to alter the training rules to allow common training programs. Applying the airplane, equipment, dispatch and communications requirements to all Part 135 commuter operations would be onerous and unnecessarily costly for the short haul airlines.

5. Q. You stated that you would work with the FAA to ensure that "appropriate" mid-air collision avoidance equipment is installed in commuter aircraft. What do you mean by "appropriate?" Is cost a factor in your statement?

A. Two types of on-board mid-air collision avoidance equipment are proposed for installation in commuter aircraft. The TCAS II system is currently being evaluated on jet air carriers. It is a sophisticated system which will provide guidance to a pilot to avoid a potential conflict. It will cost at least $100,000 per unit to install, and will require additional ongoing maintenance by the carrier.

The TCAS I system is a simpler version which would alert a pilot of the existence and location of conflicting traffic. This system is not commercially available, but estimates are that it would cost less than $20,000 per installation.

We are concerned that FAA may impose a TCAS installation requirement on the commuter industry when no system, TCAS I or II, has ever been tested on a regional airline aircraft. We are, in fact, not aware of any tests conducted using TCAS I. Cost, particularly of the TCAS II is of course a factor. We doubt that the cost and complexity of TCAS is necessary, or appropriate, for the propeller airline community, when TCAS I has the potential to provide adequate protection at a cost that will not force the airline to ground a perfectly safe airplane.

6. Q. In your testimony, you stated that there were 258 commuters operating in 1978, when the airline industry was deregulated, but that there are fewer than 180 today. Why are there so few remaining?

A. The commuter industry has largely reflected the trends of the major carriers since deregulation. In the 2-3 years following deregulation, the number of operators grew, peaking at approximately 280. Since then, mergers, acquisitions and bankruptcies have steadily decreased the number of individual regional airlines. Just as with the major carriers, weaker companies cannot easily survive in a very competitive business. While the number of regional airplanes flying and cities being served has continued to grow, the number of individual companies has decreased.

I appreciate the opportunity to offer the perspectives of a small airline on these important issues.

Sincerely,

Don Young

Don Young
President

The CHAIRMAN. We will file your full statement.

Mr. Thornton, can you do the same?

STATEMENT OF JOHN F. THORNTON, NATIONAL COORDINATOR, NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION, ACCOMPANIED BY LARRY BARBOUR, AIR TRAFFIC CONTROLLER, WASHINGTON CENTER

Mr. THORNTON. Mr. Chairman, yes. Thank you and thank you for having us here today to testify.

With me is Larry Barbour, a controller from Washington Center out in Leesburg.

The CHAIRMAN. Yes, that computer that goes out every time I go out there.

Mr. THORNTON. Yes.

And Larry has agreed to spend his one day off with us to answer any questions you may have.

Rather than go through my statement that you have for the record, I would like to comment on a few things that were brought up during Mr. McArtor's testimony, and I will be very brief.

We feel that the system needs an additional 3,000 controllers. We feel that with the growth in the system today and the amount of traffic involved, the system not only needs that; it can accommodate it very easily.

Even if we agreed with the FAA's contention at the end of 1981 that it had too many air traffic controllers prior to 1981—I am not saying we agree with that—but even if we did, the increase in traffic today surely can accommodate a like-sized workforce.

Mr. McArtor also stated that there is a correlation between the age of the air traffic controller and the air traffic controller's ability. We agree with that, and that is the reason there is early retirement for air traffic controllers.

We do not think it is a good idea to bring retired controllers back to act as a bandaid for the system. We need to hire and train additional air traffic controllers.

There is a down side to bringing retired controllers back into the system. They are burnt out, they have put their time in, and they deserve that retirement.

The CHAIRMAN. Let me apologize to you, Mr. Thornton and Mr. Barbour. We will submit questions to you, and we apologize that it happened this way. But they will not wait, under the rules, for us on the Senate floor, so we must go. We thank you very much for your appearance. Your statement will be included in the record.

[The statement and questions follow:]

STATEMENT OF JOHN F. THORNTON, NATIONAL COORDINATOR, NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION

My name is John F. Thornton and I am National Coordinator of the National Air Traffic Controllers Association, AFL-CIO. NATCA is the sole bargaining agent for the nation's more than 12,500 Air Traffic Controllers.

Mr. Chairman, NATCA is grateful that the full Commerce Committee is taking the time to examine what has been called a crisis of confidence in U.S. commercial aviation and whether deregulation spawned this predicament.

I would also like to thank Aviation Subcommittee Chairman Ford and Ranking Minority Member Kassebaum for their tireless work in sorting out the facts in this often heated and emotional debate. NATCA looks forward to testifying at an upcoming subcommittee hearing on an independent FAA. We found the previous hearings thought provoking and believe an independent FAA in one form or another could be the solution to many of the problems we confront today.

Mr. Chairman, I will keep my comments brief and limit them to Air Traffic Control (ATC). The Committee and other expert parties will address questions of economics and consumer service at a later date.

The question we are being asked today is whether deregulation has compromised air safety. The answer is "no," but perhaps a better answer is "not yet." Our Air Traffic Control system still provides the American flying public with a safe and orderly trip. Contrary to many political cartoons and tall tales, we do not have bedlam at our ATC facilities.

However, the ATC system is showing its age, and the wear and tear that deregulation and understaffing have placed upon it. As Senator Ford astutely observed when he introduced S. 1600, we are seeing the symptoms of a system in need of repair. And the time to deal with those symptoms is now, not when they are permitted to grow into a disaster.

The National Transportation Safety Board has testified that these symptoms include an alarming rise in the number of near-misses, operational errors and runway incursions. NATCA believes that the figures would be even higher if reporting immunity were restored. We are dealing principally with pilot reports and computer-spotted operational errors at only the Enroute Centers. No such figures are available from the ATC Terminals. Controllers used to be able to report every error to the NASA Aviation Safety Reporting System without fear of reprisal. But since 1980, they have immunity for only one report every two years; Controllers are subject to warnings and disciplinary action for other errors.

The fallout has been obvious. Reports for the NASA system now come almost exclusively from pilots, leaving an enormous information void. A NASA representative recently told an ALPA safety forum that we have been looking at the system with one eye closed.

I believe this Committee cannot gauge the effects of deregulation on aviation safety without some sort of yardstick or benchmark. NATCA contends that the measurements being used will continue to be flawed unless we restore reporting immunity. We hope that the Congress will be able to deal with this crucial problem at the earliest possible occasion.

NATCA believes deregulation is not in itself responsible for any decline in the margin of air safety. Deregulation is not the culprit; rather, it has been the Administration's response to deregulation that has caused the problems that bring us here today. The Administration has been trying to reconstruct an Air Traffic Control system on the cheap. And you just can't do it, especially when the new ATC system has to be better than its predecessor because of the demands of deregulation.

A return to regulation is drastic medicine from an ATC point of view. If Congress and the Administration are willing to make the investment, NATCA believes that a far less radical approach may provide the same benefits without the unpalatable side effects of re-regulation. But if the penny-pinching continues, it seems inevitable that we will have to restrict flight levels so as not to compromise air safety.

The Administration has failed to provide enough Full Performance Level (FPL) Controllers to keep up with flight increases caused by deregulation. Instead of more FPL Controllers, we get semantics and numbers games while we lag further behind in staffing. It has begun to resemble a race between the tortoise and the hare, and unlike the fable, the Controllers are not catching up with the flight numbers.

Airline deregulation occurred at the worst possible time for the ATC system. From 1978 to 1981, the system coped with spiralling flight rates because it had a growing work force comprised primarily of FPLs. Due in no small part to the recommendations of the Corson Committee in 1970, the FAA built up the work force and committed itself to a full-blown program of hiring and training. The ATC system could therefore adjust in an orderly and systematic fashion to the changes brought on by deregulation.

However, when FAA/DoT attempted to rebuild the system following the 1981 strike, it stopped far short of where it should have gone before flight restrictions were lifted. We now get an occasional dribbling of new Controllers from the Administration, usually after pressure from Capitol Hill, but it is wholly inadequate to meet the task. The recent 550 new *Controller* hirings under Secretary Dole are about one-sixth of what we need especially if Academy washouts and retirement figures are considered.

Air Traffic Control was never a job for the weak of heart but it was manageable given relief and normal hours on position. This has changed at many of our larger facilities, both at the Enroute Centers and the Terminals where airlines use the hub system. Stress, excessive overtime and never-ending six-day weeks are commonplace. Although we do not have any hard figures yet, I think that you will find that most of the experienced Controllers at these facilities will retire at the first opportunity. We will barely be able to keep our heads above water given the anticipated hiring/attrition rate.

The Administration has been contending that it can do more with less given new equipment that is coming on line and various creative routing plans. However, much of that new equipment does not work and much of the rest of it has been delayed so much it is beginning to resemble a Friday evening flight out of LaGuardia or O'Hare.

Clearly, this ATC system was designed to meet the air transport needs of the 1950s when large-scale commercial aviation was emerging and needed an elementary air traffic control system. However, this system is not capable of meeting the demands and stresses of deregulation in the 1980s. And we should not fool ourselves into believing that it can. It is like comparing a country road to the Interstate Highway System. One was constructed for an easier, less travelled time and place; the other was built for volume and speed. Unfortunately, we saw all too well the inherent dangers of an antiquated ATC system in the Cerritos accident. The NTSB determined that the probable cause of the accident was the "limitations of the ATC system to provide collision protection through both ATC procedures and automated redundancy."

We therefore have to have some important decisions about the future of the ATC system. From a safety standpoint, the ATC system can accommodate the growth spurred by deregulation but someone, either the users or the taxpayers, will have to pay the piper.

There is no way around the fact that it costs more money to hire more people to handle more traffic. Contrary to some popular beliefs, deregulation is not a free ride. It is up to Congress and the Administration to decide whether payment will come from an Aviation Trust Fund that is taken off budget or the normal appropriations process. Once again, if more money for staffing, equipment and maintenance is not forthcoming, flight levels cannot be permitted to rise.

However, there are some additional options we should consider from a management or structural point of view. As I mentioned at the outset of my testimony, NATCA is very interested in the two proposals that would create either an independent FAA or a government corporation dedicated to Air Traffic Control. Although, our union has not taken a position on either bill at this time, there is great merit in both of them and much that could buffer the ill effects of deregulation.

There appears to be a premise underlying the movement for an independent FAA that the FAA is engaged in both promotional and safety functions and that the two are not compatible. Last summer, NATCA testified before the Aviation Safety Commission that all promotional activities, that is Secs. 105 and 305 of the Federal Aviation Act of 1958, should be removed from FAA and turned over to DoT. This was mentioned by other witnesses as well, but was greeted with a certain amount of skepticism on the part of some Commission members who did not seem to agree that the agency was engaged in promotion.

Mr. McArtor, when he was first named FAA Administrator, stated that one of the problems the agency faces is public perception. And this is where promotion comes in. Many people believe that the agency has become what Senator Ford termed a "cheerleader" for a billion-dollar industry rather than a steely-eyed regulator of aviation safety.

I do not believe for a moment that the FAA would needlessly compromise ATC safety over a promotional issue, such as allowing an unsafe number of aircraft into a given airspace because of industry pressure. However the appearance is there, and will always be there, because of DoT's recent dominance of FAA and OMB's intervention at DoT. The agency appears more political and it is clearly under a tighter rein than ever before. NATCA has witnessed few benefits from this relationship. We are now under our third Administrator in seven years; much of the institutional memory at FAA is being lost; and public confidence in the agency's ability to act independently of DoT, especially on safety issues, has plummeted.

It is going to take a lot to resurrect that confidence and perhaps the best approach is for FAA to make a clean break with DoT. An independent FAA dedicated to safety and not the promotion of deregulation could be just what is needed. I think that we could all benefit from hearing what the FAA has to say about safety and deregulation without DoT and OMB passing judgment first.

I found it quite interesting that our most recently-departed Administrator, Admiral Donald Engen, has called for an independent FAA. Some observers have proposed the equivalent of a corporate CEO to run the agency, while still others want to take ATC operations completely out of the FAA while leaving only safety standards there.

These ideas will be fleshed out in greater detail during the remainder of the subcommittee hearings. However, we can say now that the mood for bringing change to the FAA has never been greater. We allowed deregulation to paint us into a corner and unfortunately the FAA was unable to marshall the necessary resources to address the problem. The answer from a safety point of view is that we can respond to the demands of deregulation if we have the right personnel and equipment, and an emancipated FAA to back them up.

Thank you.

QUESTIONS OF THE CHAIRMAN AND THE ANSWERS

FLIGHT LEVELS

Question 1. Given the current pattern of hub-and-spoke operations, are controllers now handling too many aircraft—especially given the fact that equipment and computers you now use are increasingly becoming obsolete?

Answer 1. The Agency was not prepared to handle the traffic increases generated by use of hub and spoke operations. Hub and spoke came into vogue with deregulation and the staffing imbalances which were just starting to become noticeable became moot with the 1981 strike. Since the strike, however, traffic has increased by at least 25% while Controller staffing decreased by 34%.

Question 2. More importantly, given the fact that the number of airline operations has increased by 30 percent in the decade since deregulation, should there be restrictions on the number of flights as a means, of encuring airline safety?

Answer 2. Yes—When we first mentioned flight restrictions in 1986, people scoffed at us. Now it has been suggested by both NTS Chairman Burnett and Mr. Crandall, CEO of American Airlines. Some restrictions would be reinstated, at least during peak periods in high density areas. Then as staffing levels increase, there could be a corresponding increase in traffic.

CONTROLLER STAFFING LEVELS

Question 3. As always, much of our focus relates to numbers of air traffic controllers. As of the end of August, there were 13,854 air traffic controllers located throughout the system. How many more controllers do you think are needed?

Answer 3. After the 1981 strike, the FAA announced that they had too many Air Traffic Controllers. I don't necessarily agree with that statement; but using their own logic, a 25% increase in traffic can surely accommodate a similar size work force of Air Traffic Controllers. Our fear is that the FAA is staffing with 1990s technology in mind. The problem of course, is that FAA R&D projections have not proven accurate and we are faced with today's traffic increases, with antiquated equipment and a reduced work force to make the whole system work. The FAA needs an additional 3000 Controllers.

Question 4. You also discussed the need for more Full Performance Level (FPL) controllers—those that can work any position at a facility. Why, in your opinion, has it taken so long to get enough FPL controllers?

Answer 4. As you know, since restrictions were stopped in 1983, traffic growth has been spectacular. Controller O-J-T is difficult during the best of times. Now, during peak traffic periods, O-J-T training is discontinued because it is too difficult to manage. Of course, there are many more peak traffic periods than ever before. Another problem that faces us, because of critical staffing, is that Controllers who can work certain positions, short of the FPL status, are left in those positions—thereby interrupting their training.

Question 5. Another reason that we are losing our senior air traffic controllers is retirement. You specifically cited stress, recessive overtime and 6-day work-weeks as reasons why controllers are retiring. It has been 6 years since the PATCO strike. Are these problems getting better or worse?

Answer 5. One only has to look at the rising tide of traffic and the low level of staffing available to see that stress on the job would increase. The Jones Committee noted in their report that the burnout level was going deeper into the work force that ever before. Of course, 6-day work weeks have not helped a deteriorating condition.

REPORTING IMMUNITY

Question 6. One problem you touched on was also addressed earlier by the airline pilots. That is the need for immunity with respect to reporting safety problems. Why don't controllers have immunity for reporting every near-miss and operational error? How far below actual error levels are current reports?

Answer 6. Controllers can utilize the current ASRS NASA Reporting System. This System, however, only allows for one immunity report every two years. This makes the Controller hesitate to report an infraction, knowing that the two year clock starts ticking. Prior to 1980 reporting levels were 70% Controller and 30% Pilot. Today those ratios have been reversed to 20% Controllers and 80% Pilots. It is like watching the System with one eye closed. As for the numbers of System Errors and Near-Misses that are unreported, one can only guess.

CONTROLLER TRAINING

Question 7. In addition to shear numbers of controllers, I am concerned that the amount of training being offered developmental controllers is insufficient? Are current training programs for new controllers adequate to bring them on line in a timely fashion? Is training a bottleneck for new controllers?

Answer 7. One thing that has interested me lately is the better utilization of new hires and accompanying funding increases for permanent change of stations (PCS) moves. Let me explain the advantages that could be derived from such a system against the background of what exists today. Under our present system, a new hiree called Controller No. 1 is sent to a high density facility such as National Airport. At the same time there may be Controller No. 2 who is a Full Performance Level Controller stationed a lower density facility such as Richmond. It might take Controller No. 1 four or five years to qualify as an FPL Controller, and there are no guarantees about that. During the same time, Controller No. 2 has spent five years at Richmond and is frustrated that he/she cannot move to a higher density facility. This Controller became frustrated over the lack of career progress and the desire to help the system at those higher density facilities.

What NATCA suggests is a system based more on the baseball farm system. The new hiree, Controller No. 1 is sent first to the lower density facility. The more experienced Controller No. 2 is then granted a permanent change of station to National Airport. Both Controllers now have a good chance to qualify in two years as FFLs: Controller No. 1 because he/she will not be challenged initially with the air traffic of a high density facility and Controller No. 2 because he/she has already a number of years experience and can more easily adapt to the rigors of the higher density facility.

The same system can apply to a Controller at the end of his career. There is no reason to discard a Controller who has burned out at O'Hare. Why not work another PCS which would move the Controller back down to the lower density facility where those talents can be best employed, i.e. helping the younger Controllers learn how to work Air Traffic.

[Whereupon, at 1:30 p.m., the committee was adjourned.]

SAFETY AND RE-REGULATION OF THE AIRLINE INDUSTRY—FINANCIAL CONDITION AND QUALITY OF SERVICE

WEDNESDAY, NOVEMBER 4, 1987

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:00 a.m., in room SR-253, Russell Senate Office Building, Hon. Ernest F. Hollings (Chairman of the Committee) presiding.

OPENING STATEMENT BY THE CHAIRMAN

The CHAIRMAN. The committee will please come to order.

Today, we undertake the second hearing on airline deregulation and our investigation into whether, for the sake of the traveling public, we must re-regulate the airlines.

Since our first hearing three weeks ago, we have accomplished a great deal. Thanks in part to the efforts of our Aviation Subcommittee Chairman, Senator Ford, we have passed both S. 1184, our Airport and Airway Trust Fund reauthorization legislation, and S. 1485, our bill designed to address airline consumer problems. That bill also included provisions from other Commerce Committee bills relating to airline labor protections, authority to approve airline mergers, and drug testing programs for safety sensitive transportation employees. In total, we have been quite successful.

At last month's hearing, we examined how deregulation has reduced the margin of airline safety. We heard from the new FAA Administrator. We heard from the Chairman of the National Transportation Safety Board. But the most persuasive testimony came from airline pilots who stated that, on several occasions, they had been pressured by management to operate aircraft they felt were unsafe—in order to meet scheduling deadlines.

In this hearing, we are shifting gears to examine the effect nine years of airline deregulation have had on the quality of airline service. This review is critical, because deregulation was conceived as a means of increasing airline competition, and subsequently, reducing fares. And while it may have had that effect for those in New York and Los Angeles, I am convinced that the airline industry has reached a position where real competition for most Americans is extremely limited.

Two aspects of deregulation concern me most—and they go hand-in-hand. The first relates to the proliferation of hub airports—where because of an effort to achieve economic efficiency, the airlines have created a monster. Service and safety have suffered at hub airports, as congestion has resulted in record numbers of near-misses—both on the ground and in the air—as well as delayed flights and missed connections.

The second is the increasing trend toward concentration in the industry and the fact that reduced competition virtually ensures that air travelers will be paying higher fares in the years to come. When we deregulated the airline industry in 1978, the top 8 airline controlled some 81.5 percent of all traffic in this country. Yet, today, these 8 carriers control nearly 93 percent of air passenger traffic in the U.S. And because these hubs are used by at most two airlines, the threat of competition needed to ensure low fares has vanished.

The recent rash of airline mergers has contributed significantly to this problem. The manner in which the Department of Transportation—who will be our first witness today—has administered its merger authority is, at best, questionable. Merger after merger have been approved—including those opposed on legitimate competitive reasons by the Justice Department.

The result is that every major carrier has had to merge to remain competitive. But that rush to merge—while helpful to the bottom line profitability of the carriers—may have sealed the fate of those travelers seeking quality service and bargain fares.

This Committee's responsibility is to ensure that the air transportation system is a viable, competitive one. I called these hearings because of the increasing number of questions raised about whether that remains true. And if our hearings lead us to the conclusion that we must act on some form of re-regulation—then we will not hesitate.

I am pleased that in addition to our colleagues at the Department of Transportation, we will be hearing from the architect of airline deregulation, Alfred Kahn. And I look forward to hearing from other key witnesses, including consumer advocate Ralph Nader, Wall Street analyst Julius Maldutis, and the Chairman and CEO of Simmons Airlines, Joel Murray.

I am only sorry that we could not attract a witness from one of the major carriers to our hearing. Northwest, Texas Air, TWA, Delta, and American were all invited but, for various reasons, declined. I am disappointed by the decision not to participate at today's hearing, but I can assure them that we will proceed—with our without them.

I will yield to the Senator from Alaska.

Do you have an opening statement?

Senator STEVENS. No, I have none. Thank you very much.

The CHAIRMAN. Senator Rockefeller, do you have a statement?

OPENING STATEMENT BY SENATOR ROCKEFELLER

Senator ROCKEFELLER. Mr. Chairman, I congratulate you on your leadership in calling a series of hearings to examine the need for reregulation of the airline industry. At a time when aviation is a front page story virtually every day, it's appropriate that the Senate Commerce Committee evaluate the effect of deregulation almost one decade after implementation.

What has airline deregulation meant to predominantly rural States like West Virginia? For West Virginia, airline deregulation has meant fewer flights, higher prices, lower quality services, and reduced safety standards.

After deregulation, the major airlines were free to abandon West Virginia for greener pastures—and many of them did. Since 1978, all seven EAS points in West Virginia have had at least one changeover in air carriers. Between 1978, when airline deregulation went into effect, and February 1987, the number of airplane departures in my State has decreased 11 percent and the number of seats has declined 29 percent. Fortunately, the essential air service program has saved air service for our small rural communities—but this is a program for which we must fight every year.

And it's not just quantity of flights that was hurt by deregulation, quality of service went downhill as well. West Virginians have been forced to depend on unpressurized planes, often without lavatories, and with little allowances for the handicapped or families traveling with infants.

While many of the commuter airlines are very safety conscious, all these airlines are now being faced with the problem of an inadequate supply of well-trained pilots. As the major carriers increased their number of daily flights, they hire away from the small airlines who cannot afford to pay their pilots as well as the major airlines. The same holds true for airline maintenance people.

With fewer flights, reduced services, and declining safety standards, you would expect that at least the cost of an airplane ticket would have dropped. But rural areas did not even attain this benefit of deregulation. Instead, following deregulation, the airfares from West Virginia almost immediately doubled, and then tripled.

Even those travelers leaving from places like New York, Houston, Atlanta, and other choice cities are rethinking the benefits of deregulation. It's true that last year our domestic airlines carried twice as many people, twice as far as a decade ago—and there were bargain airfares available to some of those travelers. However, passengers are beginning to wonder whether the bargains are really a good deal. Concern about safety, costly delays, overbooking, missing baggage, cancelled flights are causing airline passengers to reconsider.

The Senate's passage last week of the airline consumer protection bill is a strong sign that the pendulum may be swinging back—that consumers are now demanding more than a bargain from the airline industry. We now hear from constituents asking that the Government get back into the airline regulation business.

Mr. Chairman, I urge our Nation's airlines to redouble their commitment to reliable air service and safety. There must be some tangible evidence that airlines are making progress on both fronts—and soon. Otherwise, Congress will have little choice but to reregulate the aviation industry.

The CHAIRMAN. Senator Danforth, do you wish to make a statement?

OPENING STATEMENT BY SENATOR DANFORTH

Senator **Danforth**. Thank you, Chairman Hollings. I think your choice of topics for these series of hearings is very wise. Over the past 2 years, the Transportation Department has approved all but one of the 22 airline mergers presented to the Department. Several of these were approved over the objection of the Justice Department. As a result, concentration in the airline industry now approaches the level which existed before the Airline Deregulation Act was passed.

At some airports around the country, including St. Louis, Pittsburgh, Charlotte and Memphis, one airline offers more than 80 percent of the flights. Consumers face a decreased choice of airlines, and there is some suspicion that fares have increased substantially in markets where one airline offers all or most of the service. There is also some worry on the part of people who live in the communities served by these airports that passengers may receive poorer service than what would be available at an airport with more competitive service.

I will be interested in hearing the testimony of the very distinguished panel of witnesses here this morning. Dr. Fred Kahn has had perhaps more experience studying the economic deregulation of the airlines than any other human being, and his insight into these problems will be most valuable. I look forward to his testimony, and I am particularly interested in any insight these or our other distinguished witnesses may have into whether airlines fares have increased, or service quality has decreased, disproportionately as a result of the recent series of mergers approved by the Transportation Department.

Again, I thank Chairman Hollings for scheduling this timely series of hearings.

The **Chairman**. Thank you Senator Danforth.

Do you wish to make a statement, Senator Pressler?

OPENING STATEMENT BY SENATOR PRESSLER

Senator **Pressler**. Mr. Chairman, let me begin by congratulating you for holding today's hearing which is the second in a series on safety and re-regulation of the airline industry. As I stated during our last meeting on this important issue, I am deeply concerned about the current condition of our Nation's air transportation system. Far too many problems exist within the air service industry. I applaud you, Mr. chairman, for recognizing the seriousness of the situation and am pleased that we will be addressing many of these problems today. Congress must work together with the administration and industry to improve the present condition of our overall air transportation system.

Deregulation has had a devastating impact on air service, particularly on our Nation's smaller communities and rural areas. Service has deteriorated and prices have skyrocketed. During the past year, consumer complaints regarding airline service have risen drastically. My constitutents contact me to voice concern about flight delays, increased prices, poor service, lost baggage and the list continues. Although I hear that statistics are beginning to show a gradual decline in flight delays and consumer complaints, we must guarantee that air service conditions continue to improve.

I am very concerned about the "captive travelers"—those who must travel at the last minute either for business purposes or in emergency situations, such as a funeral. Many cannot afford the short notice, higher priced airline tickets and are faced with a very heavy financial burden. Mr. Chairman, I have a chart which I would like to place in the hearing record. It shows a comparison of air fares from Sioux Falls, SD, to various cities across the United States. You will note a drastic fare increase from 1978 to 1987.

During this past week, the Senate debated and passed several aviation related measures which I think is the beginning of an improved air transportation system. We addressed the Essential Air Service Program, the Airport and Airway Capacity Expansion Act and the Air Passenger Protection Act. I hope that we will continue to focus on critical aviation measures throughout the remainder of the 100th Congress.

Mr. Chairman, I commend you for scheduling this hearing and am looking forward to hearing from today's witnesses.

[The table referred to follows:]

COMPARISONS OF AIR FARES FROM SIOUX FALLS TO SELECTED U.S. CITIES (ONE-WAY FARES)

	1978	1987	Percent increase
Sioux Falls to—			
Rapid City	$51	$140	275
Pierre	38	70	184
Minneapolis	39	135	346
Denver	70	149	213
Los Angeles	139	220	158
Chicago	74	250	338
New York	122	275	225

The CHAIRMAN. We have as our leadoff witness Mr. Matthew Scocozza, Assistant Secretary for Policy and International Affairs at the Department of Transportation. We welcome him back to the committee. I am sure he has changed his mind and now he wants to regulate.

STATEMENT OF MATTHEW SCOCOZZA, ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS, DEPARTMENT OF TRANSPORTATION

Mr. SCOCOZZA. I am pleased to be back, Mr. Chairman.

The CHAIRMAN. You said nothing about the second part.

Mr. SCOCOZZA. I am so overcome with pleasure to be back, I could not get to the second part.

The CHAIRMAN. Very good. Let us hear from your experience what you are thinking these days.

Mr. SCOCOZZA. Thank you, Mr. Chairman.

I have an abbreviated oral testimony, and I have copies of that available for the Committee. With your indulgence, it will take only about five minutes.

I appreciate being asked to testify at these hearings as we study the evolution of our aviation industry since passage of the Airline Deregulation Act in 1978. I will summarize my written testimony this morning, but a full text is available for the Committee.

I would like to focus my remarks on two developments which have emerged in the wake of deregulation: airline mergers and heightened consumer concerns with service issues, concerns that are, in large part, the short-term product of airline consolidations.

As we look at the merger question, I believe a serious distortion must be corrected at the outset regarding the reasons for and results of industry consolidation. There has been some question about the vitality of competition today. Let us not be misled on one essential point. Competition is extremely dynamic and diverse in its many elements. The changing operating practices and marketing strategies which are reshaping the structure and business approaches of our airlines—from the development of new route systems to more direct international service from interior U.S. points—enhance competition. A number of airlines responded to the many industry changes that followed deregulation by seeking to consolidate and create efficiencies which might provide a competitive edge. This led to the wave of mergers and acquisitions.

As you are aware, the Department of Transportation exercises the primary responsibility for reviewing airline mergers and acquisitions under section 408 of the Federal Aviation Act. The Airline Deregulation Act established Congress' intent that consolidations be tested primarily by the antitrust standards traditionally applied by the courts to unregulated industries. The Department has followed this guidance in our merger reviews. Thus, the primary focus of our inquiries has been, as Congress intended, on the competitive consequences of each transaction.

Mr. Chairman, nine years ago approximately 39 certificated carriers were operating. A recent count estimates that about 131 are now in service. I am sure you are familiar with the study conducted by the Brookings Institution which concluded that airline travelers in the United States are enjoying $6 billion per year in benefits from lower fares and more frequent flights. The $6 billion in benefits was calculated in 1977 dollars. Annual benefits today approximate $11 billion. Also, since 1978 the number of passenger emplanements has grown by over 140 million people, a 55 percent increase.

This perspective reveals a very dynamic, highly competitive industry, not one tightly controlled and held by a limited number of parties intent on gouging the public and monopolizing a vital social and commercial transportation resource.

We are well aware, of course, that our aviation system has experienced a number of problems in the transition from a stagnant, regulated industry to a booming competitive one. Quite frankly, many of the problems the system is facing have resulted from airline mergers and restructuring. A number of the affected carriers did not prepare adequately for the new roles and resposibilities that came with consolidation. They will own up to that. They know the consumer has suffered and amends must be made.

One of the most troublesome difficulties the airlines have been wrestling with is the growth of flight delays. The Department has a number of programs under way which will help to alleviate this frustrating problem, projects like the National Airspace System Plan being administered by the Federal Aviation Administration. The NAS Plan will increase capacity through the complete modernization of our air space network. In the area of airport capacity, we have proposed and supported efforts to focus airport grant funding on projects which have the most potential for enhancing overall system capacity.

When all is said and done on the issue of increasing system capacity, however, management must be recognized as a pivotal element in our efforts. It is not unlike a situation many of us tackle every morning. Most arrive at work between 8:00 a.m. and 9:00 a.m. That leads to road congestion and the need to manage automobile traffic. Often, it simply is not possible to build enough new highways, bridges and roads.

The Department of Transportation has initiated a comprehensive program to better manage airport capacity. This effort includes ongoing and recently expanded airport scheduling investigations. As you know, DOT also recently issued a rule requiring all major airlines to publicly disclose on-time performance and flight cancellation records.

We are making headway with correcting the delay problem. Delays, as measured by the FAA, dropped 41 percent in September compared to figures a year ago, and delays have declined in each of the last three months. For the July to September period, they were down 24 percent.

I would now like to turn my attention to consumer problems in other areas and briefly explain how DOT has responded.

The DOT Aviation Consumer Affairs Office fields complaints in many areas, including those relating to air services, airfares and advertising. Complaint cases are often resolved in a matter of days.

For your information, during the last fiscal year, the Department assessed nearly $550,000 in civil penalties for violations of our aviation economic regulations. The bulk of these fines were for violations of our consumer protection rules. This amount was more than twice the prior year's total.

I am pleased to report today that consumer complaints against the airline industry declined dramatically during September. Complaints for the month dropped 23 percent from August. This was the first time since January 1987 that complaints received by DOT declined.

Mr. Chairman, there is no denying that we have had a number of hurdles to jump as the U.S. system adjusts in the new aviation environment. The expansion encouraged by deregulation has thrown us a few curves. The ability of industry and, where appropriate, government to polish and round off the rougher edges of the restructured aviation system will surely determine the future of our industry.

I believe a studied, reasoned review of the aviation sector will reveal that if the many advances we have made under regulatory reform are denied, we will deny the consumer the social and economic progress he or she enjoys as a result.

Thank you very much. I would be delighted to respond to any questions you have.

The CHAIRMAN. Mr. Scocozza, I hear you, and what I hear you say is that the problems we have are manageable, that the Department of Transportation is managing them, and that deregulation is a winner. We have a hard time reconciling that with the everyday experience.

Now, when you come down to the Brookings Institution report, do you find that what we are really doing is having about 85 percent of our medium- and small-sized communities in America, or 85 percent of all the communities in America, subsidizing the 15 percent long-range Las Vegas, Los Angeles, East-West, Chicago, Atlanta flights?

Is that what is occurring? That is what appears to be the case.

I can go to one desk at Eastern and struggle to get to Charleston, South Carolina, and I can pay half the price at the next counter and get to Miami a hour and a half sooner, which is 500 miles further away.

I see that dramatically occurring in my own experience. I know I had three direct flights to National Airport and three back when I got elected back in 1966, and now I have none. I have to struggle to either get out to Dulles or go over to Baltimore. Invariably, I am getting out to Baltimore in order to get a flight.

So my service has gone down, and my price has quadrupled yet, I am hearing the Departmental expert say everything is working just fine. I do not think I am a rarity. I hear from others who travel regularly.

What comment do you have on that, sir?

Mr. SCOCOZZA. Senator, there are a number of different situations like that one. I believe we can find in less populated, more rural parts of the United States where the traffic has declined somewhat; or because of the hub and spoke system, there is not less nonstop service.

I do find, however, that since 1978 there are 700 more city pairs that have the benefit of more than one carrier than these cities had in 1978.

The CHAIRMAN. Where is that occurring? Increased service?

Mr. SCOCOZZA. Service by more than one jet carrier. There are 700 more city pairs. I may be wrong. It may be somewhat less than 700. Between 600 and 700 new city pairs have the benefit of more than one carrier today than they did prior to 1978.

There are a lot of service benefits that have occurred. You have a story about service to your hometown. I am from Kingsport, Tennessee, and I came to Washington, D.C. in 1973 for an interview at the Civil Aeronautics Board. They did not hire me, incidentally. My airfare was $88. I went on a restricted fare in January of this year, and it was $88 again.

The fares to a lot of rural communities and the sparsely populated areas are still low, but they are restricted fares recognizing the more expensive cost for operating into a sparsely populated area.

We do have a study of small community service, and I would be delighted to make that available to the Committee for its review.

The CHAIRMAN. Well, it could be the hub dilemma and, I take it, for the economies of operating hours of equipment that everyone would come into a hub.

That then makes for the other problem that you are talking about, delays, when everything comes in and you have only 10 minutes or 12 minutes to change around not just passengers but baggage and everything else. You have to do that on 20 flights in a 15 minute to half-hour period in one airport, like Charlotte, which is a hub. I have seen it. There is total chaos.

Mr. Scocozza. Mr. Chairman, I had a birthday not too long ago, and someone from my staff gave me a present of a Life magazine published in 1968. It talked about how travelers across the country were frustrated with delays of one and three hours in a number of airports across the country.

They talked about the airport boom, and the renewed interest in air travel back in 1968. The aviation industry was slowly growing to accommodate that growth.

Actually that year, there were over 2,300 near mid-air collision reports as opposed to the recent years where they have been certainly under 1,000.

The facts are that our system is growing by leaps and bounds. We carried 230 million people in 1978. This year we are carrying hopefully close to half a billion people. The carriers are healthier for it, and the American traveler is better for the extra services available to him.

People who never dreamed of flying—I remember my own relatives talking about how it would be a dream to go to the West Coast to see the Pacific Ocean—and now that is just common travel. My mom and dad being on an airplane is probably a feat for the Twentieth Century in and of itself.

I think that is a positive development for the traveler who never dreamed that aviation would be available to him.

The Chairman. Senator Stevens.

Senator Stevens. One of the witnesses behind you is a gentleman whom we all relied upon to a great extent back in the days when we decided to be dragged, kicking and screaming, into the deregulation era.

He says one of the failures of government has been enforcment of the antitrust policy in the period of deregulation. Do you agree with that?

Mr. Scocozza. I do not agree with that, Senator, with all due respect to the witness. I believe you are referring to a very fine gentleman.

We cannot play the numbers game when we are talking about mergers. It may be very easy to say that DOT has never met a merger it did not like. There have been 21 applications, and there have been 20 approvals. I am talking about the denial and the subsequent approval of Texas Air/Eastern.

The Department of Justice, incidentally, either supported or did not make a comment on 17 of the applications. Four of the applications involved specific end-to-end mergers where there was really no competitive issue, no antitrust issue at all. Seventeen of those mergers were all done on paper because of the absence of competitive issues.

Three of the mergers involved a jet carrier and a commuter carrier. One case in point might be USAir and the Pennsylvania airlines, Pennsylvania Commuter, I believe it is called. That is seven airlines actually in a no-competition category.

Then there were four failing carriers that had no other alternative but to dissolve themselves and liquidate.

So the vast majority of those particular cases involved no competition issues.

Now, once again, I think we can have a very active debate over the Department's decisions in TWA/Ozark and Northwest/Republic. There were some very real competitive issues involved in the case, and some very hard decisions made by the Department.

With respect to the antitrust laws, I would be delighted to go step by step through those two particular mergers to show how we were in concert with the antitrust laws. We were in total agreement with the Department of Justice in philosophy.

The Department of Justice applies a structural analysis of the industry and puts great weight on the presence at hubs; great weight on a particular formula to determine concentration.

The Department of Transportation dissects every conceivable city pair and determines whether there is a presence or absence of competition. A case in point is the USAir/Piedmont merger which was just decided.

I can promise you that every conceivable city pair, 53 of them, where the two carriers overlapped was analyzed in terms of the possibility for entry for potential competitors; as was the presence of entry barriers; the slot situation; the presence of free entry at the airports; the recognition of participation by other carriers in the markets; the probable participation of other carriers in the markets. All these considerations made for a very serious review by the Department, straight down the line.

It was a very serious review by the Department straight down the line, but reasonable and responsible people can differ on some of these mergers.

I really do not want to eat up the time of the Committee. In short, my answer is: I believe that we were in concert with the antitrust laws, and, as a result, we also——

Senator **Stevens**. Do antitrust laws cover more than mergers, though? What about the hub operations themselves?

I have the feeling that the manner in which hubs are operated now means that once you are a passenger on a major airline, you are a captive of that airline and not really able to switch to another airline because of the hub operation.

I find now that, coming from Alaska, I am going through Atlanta to get to Washington. There are some interesting circular routes around. Of course, that has partially been eliminated now because Delta bought Western. It is still a fact, however, that if you fly into these hubs you cannot get out very easily except on the airline you came in on because the other airlines do not wait.

It just seems to me there is more to antitrust activity in the airline industry than mergers. Are you looking beyond just mergers as far as antitrust activity is concerned?

Mr. **Scocozza**. Absolutely, Senator, and the question you raised was a very serious point raised by the Department of Justice in the context of two mergers which the Department considered.

Another case in point would be a review of what is going on in Denver, a powerful hub for Continental and United, but there is also the presence of very, very intense competition between those two carriers for the traffic, to the benefit of the travelers and actually, I believe, to the benefit of the carriers themselves.

It is a very important consideration when we look at a carrier and the extent of any hub concentration. Two carriers owning all of the traffic in a particular market is a very, very serious consideration in a merger perspective.

With respect to a carrier, let us say as a case in point, Piedmont—or American Airlines—decides it is going to build Raleigh-Durham and create a hub. I think it would be counterproductive for the Department of Transportation or any government entity to stop their progress, or the very positive things that American Airlines is doing in San Juan.

Now, if there is a problem with any particular carrier or trying to buy another carrier's hub and eating up all of the regional service, that is a very serious problem which we would have to get into.

Senator STEVENS. Let me interrupt you. I see my yellow light, and I have one last question.

My colleagues get tired of hearing it, but I fly from here to my home, and I am closer to Japan when I am at home than I am to Washington, DC. My question is provincial, in the sense that I like to understand what causes the problems of the through passenger.

Is antitrust activity also concerned with that through passenger? What happens to the person who wants to go from Miami to Seattle? Must he really be shuttled around the way he is now? You either go to Dallas or Chicago or maybe to Cleveland or Minneapolis. In the old days you would get on a plane and go directly through.

Mr. SCOCOZZA. Nonstop.

Senator STEVENS. I can remember the days when I could get on a plane in either Fairbanks or Anchorage and come directly to Washington. That is not possible now without two stops. Did you know that?

What happens to that traveler as he or she moves from one distant point to another? Must we be totally captured by the hub policy of the airlines?

Mr. SCOCOZZA. For the most part, Senator, because we do not have the right to regulate routes any longer at the Department of Transportation, that is completely within the confines of the airlines' domain in terms of setting up their domestic structures.

When we look at mergers, however, and we look at competition—for instance, the perfect competition is two nonstops from carrier A and carrier B competing against each other—if one of the carriers, case in point with Alaska, operates nonstop and another carrier operates two or three stop, is that really effective competition? Should that be considered a serious consideration in a merger?

The Department of Justice feels very strongly that that is not an effective means of competition, and we agree with them in principle. Once again, we do a functional analysis, and we watch to see where the passengers are actually going. Do passengers actually patronize another carrier with one or two stops or do they all feel captive to the nonstop carrier?

Senator STEVENS. I am over my time, but do you, after the mergers, take into account what happens to passengers?

You have two airlines merge, and as you look at them you say, oh, these two guys can merge because the merger will not be anticompetitive in terms of this merger.

What happens to those passengers after the merger in terms of the routes that are eliminated by the merged airline? Have you pursued that?

Mr. SCOCOZZA. After the rash of mergers that took place in 1986, Senator, we did a review of what the carriers promised and what actually did, in effect happen. I would be delighted to make that available for you.

Senator STEVENS. I would like to see it.

[The information referred to follows:]

NORTHWEST-REPUBLIC MERGER

Joint Applicants—Initially, there will be new nonstop service in 31 city-pairs not presently served by Northwest or Republic.

Tentative Evaluation—As of March 1, 1987, Northwest had added nonstop service in 13 of 31 indicated markets.

Joint Applicants—The merger will result in substantial new on-line services.

Tentative Evaluation—A review of post-merger published schedules shows that the merger resulted in hundreds of new on-line services often in markets where the only service available was interline connections. In addition, it is apparent that neither carrier alone could have expanded hub operations at Detroit and Memphis as rapidly as the merged carrier has.

Joint Applicants—Northwest agreed to honor all LPP's contained in existing contracts and indicated its willingness to negotiate transition agreements with all affected employee groups in connection with the merger.

Tentative Evaluation—Northwest negotiated a transition agreement with at least one union (BRAC) which offered protections beyond those required in the collective bargaining agreements. We are not aware of any other transition agreements, but neither are we aware of any union claims that Northwest has handled the transition improperly.

Joint Applicants—Combining two carriers with complementary strengths will enhance competition in the industry.

Tentative Evaluation—Even at this early stage, Northwest has taken steps to turn Detroit and Memphis into major hub complexes. It has added nonstop service to numerous points from each of these hubs, and, compared with Republic, has greatly expanded the number of longer-haul markets served with on-line connections via these hubs. It is also using Memphis to compete in other carriers' hub-to-hub markets. For example, Northwest offers on-line connections via Memphis between Atlanta and most large hubs north and west of Memphis. Northwest has increased seats by one-third at Detroit and one-half at Memphis compared to the sum of the two pre-merger carriers.

Joint Applicants—The merger will lower costs through a much better matching of aircraft to routes; and ultimately result in lower fares.

Tentative Evaluation—A preliminary review of the combined carrier's schedules shows that in fact a considerable amount of equipment realignment has taken place. For example, in several instances wing tip-to-wing tip flights by Republic with smaller aircraft have been replaced with single flights with larger aircraft. Northwest had estimated that this would produce cost savings of $50,000 a day or $19 million annually. Further, a disproportionate increase in available seat miles, compared with departures and aircraft miles, indicates that Northwest is getting better utilization out of its larger, lower cost aircraft, which would have the effect of lowering unit costs.

Joint Applicants—The merger will not reduce domestic competition.

Tentative Evaluation—The effects of monopoly power are manifest in two ways: price increases above and service reduction below competitive levels. Post-merger data on pricing is not yet available. The only information we have to rely upon at this time is Northwest's scheduling practices for the combined carrier. Nothing we have seen suggests any diminution of competition. To the contrary its hub development at Detroit and Memphis appears to be very pro-competitive. Even at Minneapolis, we see no anti-competitive effects of the merger. While it has reduced service in several overlap markets, service is up overall. Moreover, a majority of overlap markets where it reduced service receive competitive service.

Joint Applicants—The acquisition will enable Northwest to compete more effectively against United and foreign flag carriers in the Pacific.

Tentative Evaluation—Traffic data from which we could evaluate the merger's effect on feed traffic is not yet available. However, on-line access to almost 100 cities served by Republic but not Northwest before the merger, and Northwest's aggressive development of hubs at Detroit and Memphis would necessarily enhance its ability to compete for international travelers.

TWA-OZARK MERGER

Joint Applicants—Any large scale frequency reduction would occur only in city pairs receiving sizeable service by other carriers; carrier assumed that other carriers would respond competitively to make up service reductions by the combined carrier.

Tentative Evaluation—Frequency reductions have occurred (comparing December 1986 with 1985) mainly in "overlap" markets emanating from St. Louis formerly served by both TWA and Ozark. In 30 of the 37 markets where both carriers provided single-carrier service there were reductions. In the 24 overlap markets which had service by carriers other than TWA/Ozark, the other carriers have not, to date, always responded competitively. In about a third of the markets the other carriers increased service; in roughly another third service was maintained; in others those carriers reduced or eliminated service.

Of 22 former Ozark-only markets seven have been turned over to commuter affiliates. Service has been increased at seven and maintained at eight. In former TWA markets service was increased at 18, down in 3 and the same in the others.

Joint Applicants—Those city pairs that currently receive non-stop service, will continue to receive non-stop service.

Tentative Evaluation—It appears that the combined carrier has maintained nonstop services in these markets. However, its schedule, as with most "hubbing" carriers, emphasizes connecting or single plane service over its St. Louis hub. Consequently, the frequency of nonstop city-pair service is down somewhat in some cases.

Joint Applicants—Personnel reductions will be made by relying on normal attrition and by offering a combination of incentives for early retirement, options for extended voluntary leave and incentive severance programs. These are similar to methods TWA used prior to the merger to reduce its workforce. (The applicants maintained that the merger offers, over the long term, the best—and perhaps only—prospect for increased employment at both carriers.)

Tentative Evaluation—While we do not know the precise mix of methods the combined carrier used to reduce employment, it has reduced its workforce. In August 1986, TWA and Ozark together employed 31,675 full-time and part-time workers. By November the combined carrier employed 29,768, a reduction of 1,907.

Joint Applicants—The combination will allow an increase in the size of connecting banks [at St. Louis] thereby enhancing marketing productivity of all St. Louis flights. Combined schedules would allow new single-carrier service to nearly 350 city pairs.

Tentative Evaluation—Although we cannot measure whether all of this has yet been brought about, the post-merger integrated schedule indicates that much new single-carrier service has been added. The published TWA timetable in effect before October 26, 1986 showed that single carrier service was available to an average of 67 destinations at each of 76 domestic points. The published schedule effective as of November 26, 1986, for the combined carrier showed an average of 86 single-carrier destinations from 96 domestic points.

Joint Applicants—Acquisition will promote competition in the national market.

Tentative Evaluation—According to recent reports in the trade press, TWA's share of the national market has decreased slightly from a year ago. However, it has experienced significant monthly traffic increases, its average load factor has improved and it has experienced two successive quarters of operating profits and projects a third. Last year TWA and Ozark were experiencing losses during the same period.

Joint Applicants—The combination of TWA and Ozark will improve productivity by alleviating mismatches of aircraft to route segments.

Tentative Evaluation—The evidence in this area is merely suggestive, at best. On a system basis, the average seats per departure for the combined carrier increased from 147 to 154 from December 1985 to December 1986. Domestically average seats went from 102 to 117 over the same period. The fact that a number of low density routes—particularly on the former Ozark system—were turned over to commuter affiliates also indicates some progress in this area.

Joint Applicants—The merger would reduce duplicative service which would allow more effective utilization of aircraft, better matching of capacity to demand, and free aircraft for entry into new routes.

Tentative Evaluation—At St. Louis, the main domestic hub of the combined carrier, as it was for each of the formerly separate carriers, service has been reduced in most city pairs where both provided nonstop or single-plane service before the merger. There are no data now available which can show whether or not aircraft utilization has improved. The recent improvement in system average load factors from 52.6 percent in January 1986 to 56.4 percent in January 1987 suggests that capacity has been better matched to demand, although it is far too soon to tell if this can be sustained. As for entry into new markets the merged TWA appears to have been moving conservatively. The president of TWA, in a recent address in Washington, indicated that TWA will concentrate on strengthening its position in existing markets rather than going into many new markets during the coming year.

UNITED-PAN AM PACIFIC TRANSFER

Joint Applicants—United planned to significantly increase capacity (a 7.6 percent increase in the first year of operations and a doubling of capacity in the first five years), thereby strengthening U.S. flag competition in the Pacific region. (Pan American claimed it had been unable to increas capacity because of financial constraints and had seen its share of the Pacific markets decline.)

Tentative Evaluation—Including Pan American's first quarter 1986 capacity with United's (Pan American operated through the middle of February), combined carrier capacity is up over 20 percent for the first nine months of 1986 compared to the same period in 1985.

United is offering about twice the level of service to Australia and New Zealand proposed in its application, and has established a strong hub at Hong Kong. Single-plane service to Pacific points from Los Angeles has been reduced from its proposal, but much improved at San Francisco, its apparent hub choice.

For the first three quarters of 1986, compared to the same period in 1985, the U.S. flag share of Far East traffic has risen from 41.0 to 41.2 percent. For the second and third quarters, the U.S. carrier share has risen to 42.4 percent from 41.8 percent.

Joint Applicants—United proposed to offer employment to at least 2,700 Pan American employees, including 410 pilots and 1,202 flight attendants.

Tentative Evaluation—Based on the difference between United's P-10 (Employment) reports for the Pacific entity for December 1985 and 1986, United actually added 5,134 personnel, including 386 pilots and 1,810 passenger service personnel (which includes flight attendants). While we are not able to determine how many of the added personnel were Pan American's, the reduction in Pan Am's Pacific entity personnel (4,763) was less than the addition made by United (5,134).

Joint Applicants—Pan American claimed its debt would be reduced, its fleet modernized with fewer aircraft types, and it would concentrate its operations in trans-Atlantic, Latin American, and domestic markets.

Tentative Evaluation—Pan American's average debt for the first three quarters of 1986 is about $210 million lower than the comparable period in 1985, and the carrier sold or transferred all of its B-747SP and DC-10 aircraft to United (with the average age of its remaining owned fleet declining by about 6 years). Comparing the first 9 months of 1986 to 1985, Pan American has increased capacity in its Latin American operations by 62.0%, its Atlantic operations by 19.4%, and its domestic operations by 20.6%. Pan American now also operates in the highly competitive New York-Washington "shuttle" market.

TEXAS AIR-EASTERN ACQUISITION CASE

Under the terms of the Texas Air Corp.-Eastern purchase agreement, Eastern is to continue operating as a separate company for at least two years, until late 1988. As a result, unlike the other merger cases, there has not been a complete integration of the carriers with respect to flight schedules, fleets, operations and personnel. Nonetheless, steps have been taken to rationalize the service of the carriers in relationship to one another, with Texas Air Corp. apparently providing the overall direction for the carriers in terms of marketing and pricing.

During the merger case, Texas Air Corp. contended that no long-term plans existed for the merged carrier and consequently there were no statements as to what would be done with the carriers after the merger.

Developments in a number of areas since the acquisition provide some insight into the plans for Eastern and Continental.

MARKET STRATEGY

The overall strategy appears to be to strengthen Continental and Eastern in those areas where the carriers already have a strong presence—Boston, New York LaGuardia, Washington National, Atlanta, Miami for Eastern and Houston, Denver and Los Angeles for Continental—and rely heavily on Continental to undertake expansion into new markets out of its old hubs and new ones it has established at Newark, Washington Dulles and New Orleans.

Eastern has withdrawn from several Houston and Denver markets in deference to Continental's greater presence at those hubs. Similarly, Eastern's operations at Newark have been curtailed while Continental's have been enlarged. At Washington, Eastern and Continental continue to operate in a number of the same markets, however Eastern's service is primarily at National and Continental's service is primarily at Dulles. Continental has withdrawn form several markets where New York Air was competing with Eastern and Eastern had a dominant presence—Boston-Ft. Lauderdale, Boston-Tampa, Boston-Washington National.

In the shuttle markets—New York-Washington and New York-Boston—Continental has inaugurated substantial service using Newark Airport. The Eastern shuttles operated in/out of LaGuardia. Pan American is operating in both LaGuardia shuttle markets in accordance with the slot/gate purchase agreement with Texas Air. However, due to its overall losses and potential need for cash, Pan Am may be considering sale of these operations. Reports indicate that the Pan Am shuttle operations are not breaking even yet.

FACILITIES

Continental is availing itself of Eastern facilities and equipment to build its hub network, particularly to enlarge its operations at Newark and to increase its overall operations.

LABOR

Wage concessions from Eastern unions are a major objective of the carrier at this time to bring operating costs for the carrier down to a level comparable to Continental's. The carrier's success in this area will probably dictate the course Texas Air will take with respect to Eastern in the future. If successful, Texas Air can then use Eastern as a competitive instrument for expansion. If unsuccessful, Texas Air will probably continue to shrink Eastern turning its facilities and equipment over to Continental for that carrier's expansion.

Senator **Stevens**. I would like to see you put these mergers on a string and say, okay, we will let you do this for two years but we can cancel this merger if you do not take into account consumer interest.

You have not done that, have you?

Mr. **Scocozza**. No, we have not put that type of a condition on it.

One thing that we did find in the context of that review is in terms of the ease with which the facilities were going to be consolidated, the carriers were often not able to accomplish what they promised.

We corrected that in the context of the USAir/Piedmont merger, which was the first one filed after that information was compiled. We required the carrier to prove to the Department that it was capable of consolidating when it said it would, and to demonstrate how it would be able to consolidate in the fashion it promised.

Senator **Stevens**. I apologize.

The **Chairman**. That is all right.

Senator Rockefeller.

Senator **Rockefeller**. Thank you, Mr. Chairman.

The purpose of deregulation had to do with the national interest, and the national interest is made up of a lot of lesser interests.

Now, the Senate is formed on the basis that there are two Senators from each state, which implies that all states are equal. It does not appear to be the case as a result of airline deregulation.

How do I explain to my people in West Virginia that airline deregulation is in the national interest?

Mr. SCOCOZZA. Senator, a very broad answer, which I do not believe is acceptable to a lot of people in rural America and certainly perhaps in my own area in East Tennessee, is that our economy has benefited by virtue of airline deregulation.

I believe we can show a .4 percent growth in our GNP directly attributable to the health of the airline industry.

Once again, in the context of determining airline, aviation, railroad, truck, bus deregulation issues, it was a foregone conclusion, and everybody understood both from the last administration and this administration as proposals came forward, that rural America perhaps was going to pay a little bit more for transportation services because of the cost of providing service to them.

There was not going to be the system of cross-subsidization that we had during regulation where all of the carriers were able to set their prices and factor in their costs across the board, and no matter where you were flying in the United States, you knew you were paying so many cents per mile.

So higher fares was a given, but what was expected in between by a lot of small communities was that they were going to get an enhancement in services, as my own town benefited. Instead of two jets a day, we have 12 or 13 commuter flights a day.

Some people may argue that that is unacceptable, and would rather have the two jets than the 14 commuter flights. It can be argued that service has been enhanced in many areas in rural America. I am not a Pollyanna, Senator. There are a lot of communities that have had a decrease in all forms of service as a result of changing traffic patterns.

Senator ROCKEFELLER. I do not know what is in the back of Chairman Hollings' mind, but I know that had I been in the Senate in 1978 I would never have voted for airline deregulation. I would have guessed, as you did, that rural America was going to pay the price and that people flying between Houston and New York or Los Angeles and New York would not have to worry about it.

Maybe it is not important that people flying from Washington to Clarksburg or Beckley have to pay more than to fly from Washington to Los Angeles. Maybe that is not important; or maybe the fact that we do not have pressurized planes in our commuter service, that all of our commuter airlines which are supported by Essential Air Service have turned over management at least once, which means that they have gone through financial difficulties, which means that the whole pressure on maintenance and pilots who are being trained at the local level and sopped up by higher salaries into the commercial airlines, maybe that is unimportant.

West Virginia suffers all the way around. So then the administration, both the Carter and Reagan Administrations, says that we will support you with Essential Air Service. We knew the seven airports in West Virginia were going to lose service under deregulation, but we told them, we will support you with Essential Air Service.

Now, it turns out that Essential Air Service budget has been eliminated by the administration virtually every year, and then we had to fight to continue to fund it.

Now, I am looking at the question of whether we re-regulate the airlines or not. I think that would not go over in the Senate. I must say, however, that I have had to fight the Department of Transportation at every level, all the way, in terms of any interest in what is going on in West Virginia.

I have been told by people at various levels, not including yourself, that Essential Air Service had to go at Bluefield, Beckley, Lewisburg, Clarksburg, all of them. We have had to fight tooth and nail to keep Essential Air Service in there.

Now, Essential Air Service is what you said. It was the deal that was made; that rural America was not going to do well by deregulation and, therefore, we would keep up on this other. Well, I think we are going to keep up, thanks to Jim Exon. We are going to keep up Essential Air Service.

I really do not understand what is such a good deal for rural communities in deregulation. I do not know why I should be so thrilled about deregulation. I do not know why I should vote to continue deregulation when there are no benefits for my people, who are no less important insofar as I can determine than people in New York.

Philosophically, I really have a hard time understanding that.

Mr. SCOCOZZA. Certainly, Senator, I agree with you on the statement that every American deserves the absolute utmost in terms of transportation services, and we, as a government, have every responsibility to make sure they receive it.

I would like to provide you with a copy of the report on the commuter airline industry, private sector as well as public, and I leave it up to you to determine whether it is appropriate to put in the record. It shows that the commuter airline industry is the healthiest it has ever been and has had the safest year it has ever had in its history last year.

The point I am making is that commuter carriers are designed to feed major hubs from rural America. They constitute a very, very positive development out there. One small commuter carrier, Aspen Airways, went from 640,000 passengers to 1.2 million in one year.

The health of the commuter industry is certainly going to reap benefits for rural America in terms of better access to hubs. So I hope—along with the future of the Essential Air Service program which is an active issue before this Congress—that the combination of those two things is certainly going to enhance service to rural America, or I am sure you will remind me of my statements today.

The CHAIRMAN. Senator Exon.

Senator EXON. Mr. Chairman, thank you very much.

Welcome, Mr. Secretary. I am glad you came over to talk to us today, because there are obviously many things on many minds at this table this morning.

I first want to thank you for the help you have been in a whole series of areas. You have been one person in the administration, and I hope this does not cost you your job, that has been helpful and understanding on the Essential Air Service programs. I salute you for that.

With the EAS bill that we are going to come out of the Congress with, I have every confidence that you will give enthusiastic and fair administration of that program.

It does indicate, I think, your concern for the interest in the "have not" sections of America, including Alaska and Nebraska as far as the vast populations and sparsely settled areas.

Having said that, I still feel that the points made by Senator Hollings, by my friend from Alaska, and by my friend and associate from West Virginia are not maybe fully appreciated and understood in the Department of Transportation.

Even if we had all of the equipment to provide the service that we would all like on a daily basis from point A to point B, wherever that is, we come down a situation where we simply do not have the slots, the landing facilities in the major hub airports. Even if the equipment were available and even if there were airlines or an airline that would fly from Anchorage into Washington National, there is simply not the available slots in any sort of a timely fashion to accommodate that.

If there is one problem with deregulation, I think it comes back to the situation that the "haves" or the "haves to be" control so tightly where airplanes are going to land.

I would cite to you that the latest information I have is that Texas Air and USAir have approximately half or more of the slots into Washington National.

Now, what are you going to do about that? What recommendations do you make as far as legislation is concerned?

I simply say that there is the good and bad of deregulation. I think there things on both sides of the ledger. The bad part of deregulation is that there has been a centralization and control of who goes where in America and who can land where. That does not bode well for many areas of this country, the majority of the people who live in this country, other than in the major population centers.

I think you know that there is a problem there. Could you expound on it? How do you think it can be solved and what, if anything, do you in the Department plan to do about this obvious and very pressing problem?

Mr. Scocozza. Senator, with respect to an absence of landing slots, we have a very serious problem with Westchester Airport in New York and John Wayne Airport, which are really stories in themselves.

For the most part, in terms of our national system, the absence of slots at LaGuardia, JFK, O'Hare and Washington National receive the most attention.

Our position, and I believe that of the Civil Aeronautics Board back in the last administration and into this administration until 1985, has been that Dulles and BWI were acceptable access points for carriers in the Washington market. So if you could not get into National, then Dulles and BWI were acceptable points.

With O'Hare, in the absence of slots at that particular point, there is the presence of opportunities at Midway.

With JFK and LaGuardia, there is a presence of opportunities at Newark.

However, in some cases you are able to define discrete markets. The New York Shuttle, for example, is really LaGuardia to Washington National Airport. That is an important consideration with respect to a lot of merger considerations.

The fact that slots have to be obtained is very real, and that is why we created the buy/sell rule. It at least gives carriers a means or a chance to try to buy slots if they could not get them any other way.

If Washington National had 555 slots and 23 carriers were using 555 slots and carrier Jones wanted in, it could at least have a mechanism to buy in.

It appears now that there is some evidence that carriers are having trouble buying these slots even though they have the money. A carrier recently filed a petition for rulemaking on this issue before the Department, America West, and I think that is the proper forum.

American West filed a petition for rulemaking to determine what can be done about the slots in these buy/sell airports where there is evidence that people are prepared to buy but there is no evidence that people are prepared to sell.

That is an issue regarding which the carriers in all of the cities can participate and propose some suggestions for resolution. It may have to be a mandatory lottery. The "haves" may have to give up, and the "have nots" may win in a lottery on a nondiscriminatory basis.

Unfortunately, the "have nots" may not be successful. If it is determined that it is fair to take away 10 percent and the "have nots" are not satisfied with the 10 percent, the problem will never go away.

The ultimate problem is the use—the full use—of satellite and perimeter airports and the allocation for use by general aviation of critical resources, which is a very emotional issue.

Senator EXON. My time is up, Mr. Chairman.

I just want to leave one last thought with you, Mr. Scocozza, and that is it is not suffice to say, in this Senator's opinion, that, okay, airline A, you want to fly into the Washington, D.C. area, you can land in Baltimore.

This Senator does not want to land in Baltimore; therefore, the fact that there are competitive airline landing rights in Baltimore provides no competition whatsoever to where most people want to go to Washington National.

So I think that answer begs further exploratory action on your part. If there is one place where I think you have to do more, it is to attack head on this monopoly control. Deregulation has become a monopoly for far too many airlines, as cited by the fact that two airlines have more than half the slots going into Washington National. That is not right, that is not fair, and that is not competitive.

Thank you.

The CHAIRMAN. Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

I also, Mr. Scocozza, appreciate the fine cooperation that we have received on a number of issues dealing with you and your office.

I also happen to feel that, over all, deregulation has probably been helpful in allowing millions of Americans to fly who otherwise would not have been able to because of availability and reduction of price.

I also feel that there have been significant difficulties associated with deregulation, and I am sure the following witness will be very helpful in giving us some of his ideas about these.

I am very deeply concerned about what my colleague from Nebraska was just talking about, that we are approaching an era of de facto regulation.

You mentioned in your statement that nine years ago, approximately 39 carriers were operating, and a recent count estimates that 131 are now in service. Let me point out to you, also, that the Congressional Research Service estimates that at the beginning of 1987, the nine largest airlines had a combined market share of 92.5 percent. The corresponding market share in 1985 was 78 percent. With the approval of the USAir/Piedmont acquisition, we will see a further reduction or consolidation.

I believe that my colleague from Nebraska's statement was correct. People do not want to land in Baltimore to get to Washington. I have to do that. They do not want to land in Newark in order to get to New York.

If, indeed, those are as attractive options as you state, Mr. Scocozza, then I see no reason why some of the airlines that now control the majority of the slots at National Airport or at LaGuardia would not be willing to trade some of those slots for others at the outlying airports that you described as equally acceptable.

I have forgotten who it is now who controls the majority of slots at National Airport, but it seems to me that they should be willing to give some of their slots up at National Airport in exchange for some at BWI or Dulles Airport.

I also have a great problem with this business of buy/sell. First of all, you stated one of the problems; that is, nobody wants to sell at any price.

Secondly, it is my information, and please correct me if I am wrong, that those airlines received their slots for free. They paid nothing for them, and now we are ready to give them an opportunity to make an enormous amount of profit from a zero investment. It seems to me that if we are going to be in the buy/sell business, we ought to make them buy what they got to start with.

Finally, and I would certainly appreciate your response to this, one of the areas that you addressed in turning down or overturning the court decision concerning the USAir/Piedmont acquisition case was that you would be addressing the issue of slots through a rulemaking process.

The Wall Street Journal quoted one of the officials in your department as saying the rulemaking procedure sometimes takes months, in some cases years. I do not know who that unknown official was, but if it is going to take years for you to address this slot problem, I would suggest that that is not a satisfactory answer. We need action much sooner.

So I think, despite the advances we have made, we are in serious jeopardy of finding ourselves in a situation of de facto regulation where, for example, at Pittsburgh and St. Louis airports, U.S. Air and TWA are responsible for over 80 percent of the traffic.

I think the Chairman and my colleague from Alaska were correct when they said you are the captive of the airline when you arrive in that hub.

I see every potential for de facto regulation, which then could lead to an increase in prices and a loss of most of the benefits that the average air passenger has received as a result of deregulation.

Please respond.

Mr. SCOCOZZA. That is a lot of area to respond to, but I will try, Senator.

With respect to industry concentration, I would say the difference between 1986 and 1987 was predominantly, the result of the Texas Air/Eastern/Frontier/People Express merger. Of course, all of those carriers actually had no option other than liquidation at the particular time. That is probably the fundamental change between those two years.

I would like to mention a recent merger analysis that we did, in which we studied the markets between Washington, D.C. on one hand and New York on the other hand. We were looking at people going between National and LaGuardia. We were also looking at people going between BWI and Dulles to Newark as well as JFK.

We found that the fares were very close, the yields were very close, and the passenger trends were very close. In other words, the New York/Washington, D.C. market is becoming homogenized. People are using the other airports.

As Senator Exon pointed out, some people principally prefer National Airport.

Senator MCCAIN. Would the test be whether one of those airlines would be willing to trade its slots at National for those at Dulles or BWI?

Mr. SCOCOZZA. I do not know if there would be any volunteers for that kind of a trade, Senator, but that is obviously a position that could be reviewed in terms of a rulemaking that is pending before the Department right now.

This is an observation I would like to make. One of the interesting things is that in the four airports, LaGuardia, O'Hare, JFK and Washington, D.C., where there is buy/sell, where there is an absence of readily available slots, 133 slots were reclaimed by the Department and then reallocated to new entrant and small incumbent carriers.

The vast majority of those 133 slots are no longer held by the original recipients. A number are still available. I do not want to mislead this Committee into thinking that there are slots available for jet operations out at National Airport. I am talking about off-peak slots restricted to quiet aircraft.

We continue to find that commuters will use some of them and send them back, and then we will auction them off again. Not too long ago, we lotteried off to new entrants approximately 36 slots at Chicago O'Hare. When we do get more back, we will once again turn them back.

The question of slots is a very serious one, and we intend to give it very close consideration. We would welcome thoughts and comments from members of this Committee as well as anyone else in Congress who is studying this issue.

Senator McCain. Can we expect fairly rapid action?

Mr. Scocozza. On that point, Senator, I am sorry. That is obviously way beyond the ability of this administration to control under the Administrative Procedure Act. I remember there was one FAA safety rulemaking that went on almost 12 years, but we would contemplate a very speedy review of this issue.

I do not know if a rulemaking is the most appropriate way to go about it, but in the process of the America West application that I mentioned to Senator Exon, we are asking the public to comment on the merits of that request, and then we will try to come up with ways to resolve the issue if it is within our purview.

Senator McCain. Thank you, Mr. Chairman.

The Chairman. Thank you, Senator McCain.

Senator Danforth.

Senator Danforth. Matt, welcome back to the committee.

Mr. Scocozza. Thank you.

Senator Danforth. How do you measure concentration at a major airport? What percentage of flights by one airline at a major airport reaches the danger point as far as you are concerned for effective competition?

Mr. Scocozza. It is really hard to tell, Senator.

Let us use a case in point right now. Piedmont is the dominant carrier at Charlotte, just putting the merger aside; it has 85 percent, but other carriers are welcome to come into Charlotte. It is not a closed airport. There are no entry barriers. In that particular situation it is not a problem.

Let us look at Washington National. The level of concentration of USAir and Texas Air is 50 percent. That would be a very, very dangerous merger situation. I am not even suggesting that they go out and even talk about it.

It would obviously be a problem if these two carriers were to merge, because there is an absence of entry opportunities for carriers to compete against the merged company.

Senator Danforth. Is your test only absence of entry opportunities?

This is not the chicken business, for example. You just do not go out and set up shop one day and a few weeks later you are in the business.

To be an effective competitor at a major airport requires a very significant investment, does it not?

Mr. Scocozza. Yes.

Senator Danforth. You have to have more than one or two flights a day going in. You have to have a critical mass, do you not?

Mr. Scocozza. Yes.

Senator Danforth. So it is not the kind of ease of entry situation that you would have in a much simpler industry than air transportation?

Mr. Scocozza. That is the point, Senator. If a carrier has a very powerful presence at an airport but there is evidence that another powerful carrier—let us just take American Airlines, which has a very admirable financial record—has the ability to go in, buy a block of gates, buy significant counterspace, ground handling equipment, and whatever else, and go in and compete head to head with the first carrier, that should suggest there is the potential of entry.

But there has to be a functional analysis of that market. For example, what is happening in that market today?

Senator DANFORTH. Let me say, in my view, the theoretical possibility that there may be an entry into the marketplace at some future time does not provide the kind of competition that is necessary to be an antidote to a regulated air industry.

Mr. SCOCOZZA. It is very difficult to design a general rule of thumb. For instance, if you look at Charlotte, North Carolina, you say that is Piedmont country; but right down the road is Raleigh-Durham. That is American Airlines country. If you live right in the middle, you have access to two different airports.

So that would be an argument that could be made for that particular area.

Senator DANFORTH. You can just go totally into the hinterlands in any discussion, but would you agree that there is a point at which the cause of the air traveler is not served by too much concentration at a major airport?

Mr. SCOCOZZA. Absolutely.

Senator DANFORTH. Has that point been reached at some airports?

Mr. SCOCOZZA. Yes. As a matter of fact, in the Texas Air/Eastern merger, we turned the initial merger proposal down in spite of the Department of Justice approval, because we felt that with the merged carrier, New York Air merging with Texas Air as well as Eastern, controlling the New York Shuttle, the 15 or 20 slots remaining available were not adequate to permit Pan Am to compete. There was no entry. There was no opportunity for somebody to mount very serious competition.

So, in spite of even the Department of Justice recommendation to approve, we turned it down because of the serious concentration and the lack of entry.

Senator DANFORTH. What happens, Matt, if they already have the dominant position and there is no merger that is pending? What happens if at a particular airport 80 percent of the flights are one airline? Then what? Are we just in the soup?

Mr. SCOCOZZA. We have a responsibility at the Department of Transportation that if there are carriers that want entry and want to compete with that carrier, to make sure they have an opportunity to get into the market.

Senator DANFORTH. Suppose it is all settled, Matt? Suppose it is done? Let us say that 80 or 85 percent of the flights are offered by one airline and they have it locked up and there is no reasonable possibility that anybody else is going to get in there. Then what do we do?

Mr. SCOCOZZA. If other airlines had the resources but just did not want to get in there and one particular carrier just has it all?

Senator DANFORTH. Yes. That is possible, is it not? If you have 85 percent of the flights at an airport, say, and the airport is a very busy airport, you have it pretty well locked up, do you not?

Mr. SCOCOZZA. In light of that situation, Senator, a hypothetical might be Kingsport, Tennessee, to use my own city. If all of a sudden a carrier went in there and owned 95 percent of the activity, we have no jurisdiction if there is no merger.

Now, if there are deceptive practices going on or——

Senator DANFORTH. No deceptive practices; they just have a lock. You want to fly out of the city, and you call up whatever the local airline is and say I have to get to New York or wherever you want to go. They say fine, we have a flight that goes through wherever we want to send you through and here is the price.

Mr. SCOCOZZA. There is really no jurisdiction that the Department would have or, I believe, that the Department of Justice would have, in a particular area where a carrier voluntarily goes in, maybe even builds the hub itself, and has no competition.

Senator DANFORTH. Has anybody considered what, if anything, Congress should be doing about this?

Mr. SCOCOZZA. We have not found the need to do that because once a carrier has a dominant position like that, chances are another carrier will develop a hub in the near vicinity, and it has been shown to happen. Witness American moving into Piedmont territory and developing the Raleigh-Durham hub.

Senator DANFORTH. What is the near vicinity to St. Louis?

Mr. SCOCOZZA. Well, we have Kansas City as an alternative.

Senator DANFORTH. That is 250 miles away.

Mr. SCOCOZZA. Well, Senator, I would hope somebody would want to move 40 or 50 miles away and develop a major hub, but I am talking about——

Senator DANFORTH. What is somebody who lives in St. Louis going to do? Call up Kansas City and say what are the flights out for New York?

The CHAIRMAN. Now you have got it.

Mr. SCOCOZZA. That was a major issue in the merger between TWA and Ozark and Northwest and Republic. I believe those were the two very, very serious mergers and competitive issues that we had.

Senator DANFORTH. What do we do for these people now? Just say call Kansas City, maybe they have a flight?

Mr. SCOCOZZA. You have a very good point, Senator. For the most part, we found that in communities like that where there is no effective access to any other place, there is always some carrier that will provide service to their hub either through commuter service, which is very, very powerful in the St. Louis Airport, to the Kansas City hub or to another hub, or to Cincinnati where a person would have access to the Delta system, or the Eastern Airlines system and fly through their hubs.

Senator DANFORTH. It would take a couple of days to get there. It is not realistic, then.

The CHAIRMAN. Senator Kassebaum.

Senator KASSEBAUM. I have heard some very good and thoughtful questions and answers and perhaps for just a moment maybe I will offer some of my own opinions and then ask a question. I think all of us have had days when we wish we could go back to regulation and other days when we obviously recognize that, one, we cannot, and, two, really we do not want to.

It seems to me there are some significant dislocations that have come with deregulation and particularly out of the evolving hub and spoke pattern. I think Senator Danforth's illustration of St. Louis is a very good one.

Those of us in rural areas have suffered because with regulation, the long hauls subsidize the short hauls. Now the reverse has occurred.

It seems to me that your comments on the commuter industry are interesting because if our system is to work at all, we have to improve the commuter services. One of the reasons why I argued about the Essential Air Service issue was not that we do not need that service for smaller communities, but that it is so expensive. Most people cannot afford to use it unless they can charge it off to business.

The program is not meeting the needs of much of the public, and we should be looking at ways that we can reduce the fares so that people can afford to use it to get to a hub.

I understand that with some of the smaller carriers using planes that seat 12 to 15 people or less, it is a question of liability insurance. Most of the smaller operators just cannot afford that, and it becomes a problem, for instance, in some of the communities in Kansas.

Secondly, as you know, I fought the buy/sell issue because I very much disagreed with the interpretation of the Department, and the Senate is on record for almost unanimously rejecting the buy/sell concept for some of the very reasons that you have pointed out. It allows the major airlines controlling an airport to significantly enhance their control, and none of these carriers are willing to sell their slots.

I believed we should look at establishing standing allocation committees as a way of reducing some of the concentration at a closed entry airport such as National.

With Dulles, there is no problem. America West can go to Dulles today. I personally would wish, of course, that Wichita or Omaha or Phoenix would have access from America West to National but, again, that issue should be determined through a rulemaking.

Is it not correct, in thinking in terms of regulation or re-regulation, that if we re-regulated routes today, we would really have to pay much higher airfares?

Mr. SCOCOZZA. No question about it, Senator, because people have invested billions and billions of dollars, without exaggeration, on aircraft to serve the routes that they have in their business plan as opposed to the old way under regulation where aircraft were purchased on the basis of the route awards that were given to them by the Civil Aeronautics Board.

So if we went around and started telling carriers where to fly, they might once again have to readjust their fleets and buy appropriate aircraft that could efficiently operate in those particular markets and the fares would certainly go up.

Senator KASSEBAUM. Say at Lambert Field in St. Louis or Stapleton in Denver where there is no high density designation and yet most of the service is offered by one or two airlines, is there a way to reduce some of the concentration, by perhaps strengthening commuter service or by some action involving fares?

Mr. SCOCOZZA. Exactly.

Senator KASSEBAUM. I do not know how good we are at analyzing this because, basically, we are not paying our airfares out of our own purse. It comes with our travel allowance.

Those who do have to pay for it themselves tend to look for the cheaper fares.

If you have only a few airlines controlling an airport, those airlines can set the fares because there are no alternatives. We worry that we are moving in that direction, and that we are going to lose some options we should be looking before they are foreclosed to us.

Mr. SCOCOZZA. I think the point that you made, Senator, about the commuter aircraft industry is a very powerful consideration because we find that commuters have been, by way of associating with a major carrier through shared code operations, able to practically double their traffic.

The traffic is not coming from other carriers. The traffic is coming from the automobile and the intercity bus. People are getting on the commuter carriers, the TWA Express, the Continental Express, United Express, Eastern Metro Express, and continuing on to a hub where they would have access to a major facility to fly anywhere they want in the country.

When a carrier infiltrates a place like Pittsburgh or St. Louis for example, through the commuter market, the passenger loads will increase. As people get attracted to frequent flyer programs and whatever, eventually that will lead to a carrier replacing the commuter operation perhaps with a jet operation.

We have seen many situations where commuter carriers have become so healthy that they have replaced their 20- or 30-seat aircraft with these very small jet aircraft, the British Aerospace 146, the very small four-engine jet aircraft. That is the way carriers are gradually able to infiltrate each other's markets without a major investment. That is a very powerful competitive tool for a lot of carriers.

I have seen the presence of one small commuter that is doing a healthy business in an airport exert discipline on a very large jet carrier which has a large presence at the airport. This is the fear of contestability. The fear of having one of your major competitors come and infiltrate your market is a very powerful motive in the economic theory that discipline will be kept in the market so long as there is free entry. However, that case cannot be made very well at National Airport or LaGuardia.

Senator KASSEBAUM. Thank you very much. My time is up.

The CHAIRMAN. Thank you.

Senator Ford.

Senator FORD. Matt, I think that you are getting the message here today that there is some interest in slots.

You stated in the USAir/Piedmont merger that slots were not an issue, yet they stated very emphatically in their press releases they had to have this merger in order to compete. Competition is slots, and so by merging they have more slots. They can change equipment, change their schedules and still maintain those slots.

Describe for this Senator what a slot is.

Mr. SCOCOZZA. Every airport, Senator, has an engineering standard. For example, at Atlanta Airport, 37 operations in a 15 minute period is considered the safe level of allowable operations. At Washington National the daily total is 555. That is within the bounds of the curfew.

Senator FORD. Five hundred fifty-five what?

Mr. SCOCOZZA. Operations: landings and take-offs.

Senator FORD. In how long a period?

Mr. SCOCOZZA. I believe it is 7:00 a.m. to 10:00 p.m.

Senator FORD. Well, you said 15 minutes on Atlanta a moment ago.

Mr. SCOCOZZA. I know specifically at Atlanta Airport it is 37 in a 15-minute period. I believe it is 37 air carrier operations in a one-hour period at National Airport. I would like to correct that for the record. I do not want to misstate it.

Senator FORD. So what you are saying is that the ability to land at a given time is a slot?

Mr. SCOCOZZA. Right.

Senator FORD. Then once they get the slot——

Senator DANFORTH. We start with FFA-engineered standards for operations in a finite period of time.

Senator FORD. That is right, and so the landing ability is a slot.

So then they have to have a counter if they get a slot. Then they have to have a gate if they get that slot. So you begin to look at what a slot really means.

Now, as I understand it, there is at least one airline that is financially viable, because that particular airline has a good many slots, and if they need to have an asset they just increase the value of the slot. They are not going to sell it. It is worth $1 million this year, and next year it is worth $2 million.

We find airports out there that want to generate some competition that look at the possibility of buying a slot, and they cannot buy them. They are just not for sale.

Now, what I am thinking is going to happen in the slowness of the rulemaking is that we are going to have another consumer bill around this place, and we are going to get into the slot business.

Now, I am not sure that is where we ought to be, but I think it is obvious from the questions you have had since I have been here that slots are becoming a major issue, particularly for competition.

You have a letter from me on slots along with some others. I think it is very, very important, because we have the "haves" and the "have nots", and there are a lot of "have nots" that are pretty decent airlines.

You talk about how great the commuters are. I have one in my hometown. I do not get in or out unless I fly on that commuter. Instead of going out to the major metropolitan city in my state, from Owensboro to Louisville, which is roughly one-third of the population, they have decided to take me to their hub, and they want to discontinue all flights to our major metropolitan center.

So that commuter is fine for me getting to Washington, but it is not doing a darned thing for the economy of my state as it relates to the major second-class cities of the state having the ability to get to the metropolitan centers.

So they are doing their financials. You know, you check on why the flight is cancelled. I found out I was the only one on it. I can tell you it is cancelled for economic reasons, not necessarily maintenance reasons.

Now, let me ask you this. How much movement from high density airports do you think will occur to hubs?

Mr. SCOCOZZA. Most of the high density airports that we are involved in now, Senator, are hubs, but I believe that a lot of carriers are recognizing that their growth potential is at the satellite airports.

A lot of the carriers that were at National Airport five years ago and were not interested in Dulles—American Airlines and United Airlines, for instance—have actually built mini-hubs out at Dulles. That is just the way things are moving.

People are recognizing that if they want to build a hub operation, their opportunities in these major metropolitan areas are not as great unless they move out to a satellite airport where their costs are lower and the passenger convenience is——

Senator FORD. Matt, let me say, Chicago is the only hub for United and American, I believe, is it not?

Mr. SCOCOZZA. No. United has a very large hub in Denver and a very small hub in——

Senator FORD. But that is not a high density airport.

Mr. SCOCOZZA. Right. You asked me——

Senator FORD. About the high density airports. How many are going to move away from that and have hubs someplace else, move out of the high density airports.

The only one I know of is Chicago, where you have a hub with the major airlines. Outside of that, they are away from the high density airports.

Mr. SCOCOZZA. National Airport is a high density airport, and LaGuardia.

Senator FORD. Yes, but are they hubs?

Mr. SCOCOZZA. Yes.

Senator FORD. What is the definition of a hub, then? They are not connecting hubs.

Mr. SCOCOZZA. If you look at the traffic going in and out of National Airport, you will find a tremendous amount of traffic not getting off or on at National but changing; for instance, on the Texas Air system. Eastern Airlines has a large percentage of people who neither start nor end at National Airport but travel through.

United Airlines and American Airlines, both desirous of having a major presence in Washington, D.C., decided that their growth opportunities were out at Dulles Airport. Piedmont determined that their growth opportunity in the Washington Metropolitan Area would be at Baltimore.

Carriers that want to have a major presence in the city are recognizing their opportunity is probably at the satellite airports as opposed to trying to infiltrate an already-saturated airport. Even if they could get the slots, the question of whether there would be——

Senator FORD. They cannot get the slots, Matt. Then you come right back to where we are. They cannot get the slots.

Mr. Scocozza. I am also saying, Senator, if they could get the slots at National Airport, there is also a question of how they could be accommodated with gate space as well as counter space.

Senator Ford. That is up to them, is it not? If they get the slot, the counter and the gate, they could build that themselves like other airlines have done.

It is not anything unusual. It is just that they are willing to do that, but there are no slots.

So it all comes back down to one little word: s-l-o-t-s, slots.

Thank you, Mr. Chairman.

The Chairman. Senator Pressler.

Senator Pressler. Thank you very much. I was going to talk about slots also, but I think that subject has been exhausted.

There is a general assumption that rates are lower comparatively since deregulation. Is that true?

Mr. Scocozza. They are generally lower, Senator.

Senator Pressler. What do you think about rates from South Dakota to other cities? What would be your assessment of those?

Mr. Scocozza. For a millisecond, Senator, I actually thought before I said they are generally lower, but predominantly I would imagine that the rates are higher if they are not restricted. If there are Max Savers or the super restricted fares, I would imagine that the rates would be generally lower.

Senator Pressler. Well, I have a chart comparing one-way air fares from Sioux Falls, which is our largest city, to selected U.S. cities. The chart compares 1987 fares with 1978 fares, and while there is no adjustment for inflation; fares are nonetheless up by as much as 338 percent. To Chicago, up 238 percent; to New York, up 225 ~~percent;~~ to Washington, up about 300 percent; from Rapid City, our second largest city, they are up about 275 percent to selected destinations.

I know that South Dakota is a less populated state but, in addition to that, we have virtually lost service in other parts of the state.

What is the reason for the percentage increase in fares to those various cities? I mean, Sioux Falls is a pretty fair-sized town. It has 100,000 people plus the surrounding towns.

What do you think is the reason the rates are up?

Mr. Scocozza. I would say, Senator, we are probably talking about the unrestricted coach fares, the Y fares.

I recently flew from Dulles Airport to California on a day's notice, and my roundtrip fare was $700. There was no government contract fare available. There was nothing available. I just had to pay the roundtrip coach fare. This was, incidentally, on Continental Airlines.

Senator Pressler. That would be about $610 if you flew to South Dakota. Why do you suppose it is so high to South Dakota? What would your professional judgment be?

Mr. Scocozza. Senator, the cities that are the most difficult to operate to, I would imagine the carriers would probably impose more restrictions on the availability of the cheaper fares, and for the unrestricted fares they would be much higher in the cities that are more difficult to operate to and are more sparsely populated.

Under deregulation, we have allowed carriers to more accurately reflect their costs of serving a community. It is the same case with theater tickets. You buy a ticket. There is no refund. You do not get your money back if you do not get on the flight.

If a carrier has a $40 million aircraft and you call them and say I want to reserve a seat——

Senator **Pressler**. I understand all that, but I really think there is some advantage being taken where there is not much competition. I really have a feeling that we are subsidizing some of those special deals, so to speak. Rapid City has about 100,000 people and the surrounding areas, which include Ellsworth Air Force Base. There is a lot of traffic in and out.

I just think that is the price airlines can get away with charging. I do not think it has much to do with the market.

Mr. **Scocozza**. Certainly, monopoly power can always play into a higher fare scenario. I would be delighted to have my staff look into the actual fares and perhaps give you a report on South Dakota or any other city in your state which you would like, but I would hope that the study would show that the fares are probably related to the traffic loads, the number of people traveling, and the cost of the carrier to that point.

I would also guess I would find evidence of very low Max Saver fares in addition to the high coach fares.

Senator **Pressler**. A lot of people have to go to a funeral or some other event on short notice, which means they have to pay the high coach fare.

Mr. **Scocozza**. Exactly.

Senator **Pressler**. Especially businessmen or women. In my own case, I really cannot schedule a flight much in advance because I never know when we are going to finish voting around here at the Capitol.

While it is true that we do not pay for this out of our own pocket, I find that I run out of my travel money because I sometimes have to charter out of Minneapolis to get to certain places in my state. My travel money is used up fairly quickly, and I start using personal money or find a reason to use campaign money or paying for it one way or another.

Of course, the slot problem affects us very much, but that issue has already been discussed.

I am hearing a kind of a cavalier attitude being expressed by Washington officials who say, well, South Dakota does not have very many people, and that is a tough problem. I do not believe it is just the economics. I believe this is exploitation of travelers especially those from Sioux Falls, which is a town of 100,000 plus the several towns around it.

For the captive traveler, the person in America from the smaller town, whether it is Upstate New York or wherever, who has to go to a funeral, who has a business engagement, who cannot schedule three weeks in advance, there is just an immense discrimination against that person in the system.

The **Chairman**. Senator Kerry.

Senator **Kerry**. Thank you, Mr. Chairman.

Mr. Secretary, I would like to draw your attention to some figures which I think have just been put together. In order to demonstrate the effect of airline consolidation, we asked our folks in Boston to examine Logan Airport, comparing service levels in 1984 and now. We picked 1984 because it was six years after the enactment of deregulation, and I think it represented the moment when there was competition; deregulation was beginning to take hold.

At present, Logan has direct, nonstop service to 44 domestic cities. Half of those are fully monopoly markets; whereas, in 1984, only 26 percent were served by only one carrier. So there has been an enormous shift in one-carrier monopoly service. A specific example, Boston-Baltimore had three airlines in 1984, now there is one. The same is true for Detroit, for Minneapolis. There were two choices, now there is one.

But I think the issue goes well beyond simple monopolies. There is the question, and it has been raised by some of my colleagues about the concentration in the largest markets which reduce consumer choice and the effect on consumers as a result of that. In Washington, D.C., to which many travel very frequently, 58 percent of the flights from Boston are now conducted by one carrier, whereas in 1984, the largest carrier only had 36 percent.

But I think you can even go further. In 1984, the largest carrier in Boston had 18 percent of all the flights. In 1987, the larger carrier now operates 44 percent of all the flights. And in 1984, it took 14 carriers together to operate 75 percent of all the flights. Now four carriers operate 75 percent of all the flights in and out of Logan.

Now, the result of these mergers, my colleagues have pointed to them in terms of the slot problems and all the others, we had a small commuter airline, and this is replicated, I understand, all over the country. Gull Air provided significant services in the New England region as a Peoples Express designated carrier. Then, with the Peoples Express/Continental merger, Gull Air had to file Chapter 11 bankruptcy. It has charged Texas Air with unfair competitive practices in the process. I gather similar suits have been filed by other regional airlines that lost their affiliation.

So I have several questions. First of all, can you tell us that this is good policy, both in the forcing out of these commuter lines, as well as in this consolidation of available choices to consumers and the creation of monopolies?

Mr. SCOCOZZA. With respect to the commuter question, Senator, obviously when anyone loses an opportunity to compete, that is not in the public interest, and the court is the place to question whether an anticompetitive action has taken place by a major carrier which may have already owned several commuter affiliates with which it chose to associate. The shared code operators are very powerful, they are very effective, and there are a lot of major airlines that encourage commuter airlines to affiliate with them. It enhances the quality of their service; it enhances the safety records of many of the carriers as a result.

But the question that you were mentioning about the large hubs losing——

Senator KERRY. Well, there are a whole bunch of lawsuits now, correct?

Mr. SCOCOZZA. There are.

Senator KERRY. What do you think of the chances of those lawsuits?

Mr. **Scocozza**. I think if there can be a case made for discriminatory action, anticompetitive action by a particular carrier to eliminate any of its competitors, the judge is going to find in the plaintiff's behalf.

Senator **Kerry**. Do you think that a situation has now been created where it is impossible for a regional carrier to exist without a contractual bond to a major carrier?

Mr. **Scocozza**. I find that consumer preference is for a commuter that does have a shared code affiliation. I remember——

Senator **Kerry**. That is not my question.

Mr. **Scocozza**. No, I know——

Senator **Kerry**. Is it possible for them to exist without that?

Mr. **Scocozza**. I believe it is possible for them to exist. There are independents in the nation that have existed on their own, but I see commuters of similar size in similar situations that have chosen to affiliate who have not only increased their passenger loads, but have increased their revenue base and have improved their financial position. It is their independent choice, and it is tougher, Senator, because there is a preference by consumers for a shared code operator.

As Senator Exon was mentioning earlier about the essential air service program, there is a clear preference by cities to have service not just by a commuter, but by a commuter affiliated with a major participant because they want the direct connection to major hubs, and the residents of the rural areas want to have access to the frequent flyer programs and all of the other service benefits that come along that a major carrier has to offer, and perhaps the hope down the road that the major carrier would choose to bring its jet in.

So it is a combination of several factors. But the community, the city preference and the consumer preference is a very strong factor.

Senator **Kerry**. Well, my time is up, and I do not want to go over it, but I am over it, but I do want to just say to you that it is almost frustrating for everybody here because we are all saying it, we have been saying it for months, and the rulemaking response just seems to be so far behind the curve, and as a matter of policy, when you see statistics like this, I just do not see how anyone can pretend any longer that we can go on with this current philosophy that somehow we are being better served by the creation of these monopolies and the diminishment of service.

Enough said.

Thank you, Mr. Chairman.

The **Chairman**. Thank you, Senator.

As you can see, Mr. Secretary, the committee is concerned about safety, the hub approach to safety and to service, and the concentrations and the mergers, as well as the control of slots.

And thanking you on behalf of the committee, would you furnish for the committee the assignment of slots at National Airport in 1978? All of this talk, I think could be totally wrong, and you correct my thinking, but much of the talk that we are talking about in slots was never intended to be changed by deregulation. In other words, when we deregulated, we expected the market forces to then take over, not regulation to take over, but deregulation. It was absolutely illegal for America West to land at National Airport under regulation. We had the perimeter rule there. People seem to totally disregard where we were, and all the rest of those particular slots held by Eastern, with its shuttle services were all allocated under hearings of public convenience and necessity.

I do not think that has been changed too much, even though mergers have concentrated some. Let's look and see where they were under regulation.

[The following information was subsequently received for the record:]

Washington National Airport air carrier operations

[DCA Slots, August 1978]

American	74
Allegheny	85
Braniff	20
Delta	34
Eastern	140
National	48
Northwest	40
Piedmont	68
TWA	40
United	64
Total	613

Note: There are only 555 slots available per day at DCA currently. In 1978, 40 air carriers operating per hour were permitted (37 today). In addition, the 2200 hour (10 p.m.) is now restricted.

We thank you very much, and we will leave the record open for further questions by myself and other Members. We need to move on to the other witnesses.

Thank you very much.

Mr. SCOCOZZA. Thank you.

The CHAIRMAN. Do you want to add something?

Mr. SCOCOZZA. Well, if I could just very quickly respond to a question Senator Kerry brought up.

The CHAIRMAN. Sure.

Mr. SCOCOZZA. One of the factors that really does have to be brought to bear, Senator, is the growth factor. Perhaps in some communities, particular carriers have gotten a major share of the traffic, but if you look at the number of emplanements in previous years and today, there has been an explosive growth. It is a direct consequence of the efforts carriers have put into building traffic—for instance, Continental at Denver.

Regarding the point that you mentioned about only one carrier flying between Boston and BWI, I know of Eastern flying between National Airport and Boston, and there is a carrier that flies between Dulles and Boston. If you look at the city as a market, as I mentioned earlier, we have reviewed studies and statistics showing that routes between two cities, regardless of the airport, have shown the same yields, the same profits being made, the same fares being offered, and principally the same passengers moving back and forth. That is an important consideration. It is not controlling, but it is an important consideration in light of the question that you posed to me.

But I thank you, Mr. Chairman, for the opportunity to be here today.

The CHAIRMAN. Well, we thank you very, very much.

[The statement and questions follow:]

STATEMENT OF MATTHEW V. SCOCOZZA, ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS, DOT

Mr. Chairman, members of the committee, I appreciate being asked to testify at these hearings as you study the evolution of our aviation industry since passage of the Airline Deregulation Act.

Today, I would like to center my testimony on two developments which have emerged in the wake of deregulation: Airline mergers and heightened consumer concerns with service issues—concerns that are in large part the short-term product of airline consolidations.

As we look at the merger question, I believe a serious distortion must be corrected at the outset regarding the reasons for, and results of, industry consolidation. There has been some question about the vitality of competition today. Let's not be misled on one central point: competition is extremely dynamic and diverse in its many elements. The changing operating practices and marketing strategies which are reshaping the structure and business approaches of our airlines—from the development of new route systems to more direct international service from interior U.S. points—enhance competition.

A number of airlines responded to the many industry changes that followed deregulation by seeking to consolidate and create efficiencies which might provide a competitive edge. This led to the wave of airline mergers and acquisitions.

As you are aware, Mr. Chairman, the Department of Transportation exercises the primary responsibility for reviewing airline mergers and acquisitions under section 408 of the Federal Aviation Act. Prior to passage of the airline deregulation legislation, the Civil Aeronautics Board has broad discretion to approve, under a "public interest" test, practices in the airline industry that would have violated Federal antitrust laws. Further, section 414 of the Federal Aviation Act provided antitrust immunity for any approved transaction.

The Airline Deregulation Act established Congress' intent that airline mergers, acquisitions and intercarrier agreements be tested primarily by the antitrust standards traditionally applied by the courts to unregulated industries. Transactions that would be deemed unlawful under the Sherman and Clayton Acts could nevertheless be approved if they met significant transportation needs for secured important public benefits, and if there were no materially less anticompetitive alternatives available.

The Department has considered a number of merger and acquisition cases during the past three years. We have acted with great care and within the guidelines set by Congress. Our approval of mergers and acquisitions has been based on evidentiary records that show no likelihood of a sustantial reduction of competition in any relevant markets. Thus, the primary focus of our inquiry in each merger case is, as Congress, intended, on the competitive consequences of the transaction. This approach recognizes the important role that competition plays in disciplining carriers' pricing and service decisions, and focuses on those considerations that affect competitive performance. For this reason the Department's merger analysis carefully examines the structural characteristics of the markets at issue—characteristics that are most likely to determine the ability of competitors to check the exercise of market power by the marged carriers. In this context, the crucial question in each case is whether the merged carriers would be able to raise prices above, or reduce service below, competitive levels. For most cases, the structural analysis focuses on entry conditions at the points most affected by the consolidation. For example, the Department closely examines airport space availability and related factors to make sure that airlines can easily enter routes to and from a facility to be affected by a merger.

In exercising its antitrust authority, the Department has been mindful of the procompetitive policy orientation of the Airline Deregulation Act. We wholeheartedly support Congress' approach and have followed its direction. For this reason, the Department usually has not become involved in the details of the proposed transaction beyond that involvement necessary for a sound competitive review. We strongly believe that the marketplace should be the principal discipline for the carriers' business decisions and that DOT's role in a deregulated environment is to protect the competitive process, not individual competitors. We have been guided in this direction by congressional intent as laid out clearly in the conference report on the Deregulation Act which states, "the foundation of the new airline legislation is that it is in the public interest to allow the airline industry to be governed by the forces of the marketplace."

The Department has also concluded that it should not interfere with consolidation decisions reached by airline managers and other private parties, except to the extent necessary to block airline mergers and acquisitions that violate the standards of section 7 of the Clayton Act. We have, therefore, exempted transactions from section 408 review procedures when they appeared to present no significant competitive issues. Similarly, we have approved voting trust arrangements which allow an acquiring carrier to pursue a bid for another carrier, without awaiting final approval, as long as the voting trust prevents the acquiring carrier from exercising control over the target airline while the Department reviews the acquisition.

The Department has not approved any section 408 transaction on the ground that, although anticompetitive, it meets important transportation needs and secures public benefits that cannot otherwise be obtained. Nor have we granted antitrust immunity to any approved transaction. Twenty-one applications for section 408 approval of substantial transactions have been filed since January 1, 1985. The Department has issued final decisions in each of these cases.

Mr. Chairman, nine years ago approximately 39 certificated carriers were operating. A recent count estimates that about 131 are now in service. I am sure you are familiar with the study conducted by the Brookings Institution which estimates that today airline travelers in the United States are enjoying about $11 billion per year in lower fares and more frequent flights. Fares have remained below pre-deregulation levels. And, over 90 percent of all passengers are traveling on discount fares, substantially above the 47.9 percent figure prior to deregulation. In fact, discount fares, by and large, have prevented average yields from rising as rapidly as the rate of inflation. Since 1978, the number of passenger enplanements has grown by over 140 million—a 55 percent increase.

This perspective reveals a very dynamic, highly competitive industry—not one tightly controlled and held by a limited number of parties intent on gouging the public and monopolizing a vital social and commercial transportation resource. The institution of a hub-and-spoke network has expanded the system greatly to ensure wider service; the development of frequent flyer programs has rewarded passenger loyalty. These competitive innovations—and many, many others—benefit the flying public today.

The airline industry has also benefited from the reforms fostered by the Airline Deregulation Act. Operating revenues have more than doubled, from $22.9 billion in 1978 to over $51 billion today; between October 1978 and May 1987, scheduled revenue passenger miles increased 73 percent, from 222 billion to 384 billion; scheduled available seat miles have also increased 73 percent since 1978, from 362 billion to 626 billion; and the industry workforce has increased from 341,315 full and part-time employees to 466,634, a 37 percent rise.

We are all well aware, of course, that our aviation system has experienced a number of problems in the transition from a stagnant, regulated industry to a booming competitive one. Obviously, these hearings wouldn't be necessary if the system was experiencing a tranquil transition. Quite frankly, many of the problems the system is fighting through have resulted from airline mergers and restructuring. A number of the affected carriers didn't prepare adequately for the new roles and responsibilities that came with consolidation. They will own up to that—they know the consumer has suffered and amends must be made.

One of the biggest and most troublesome difficulties the airlines have been wrestling with is the growth of flight delays. Under the best of circumstances delays are sometimes an unfortunate fact of travel given the physical, economic and environmental considerations that limit the airport and airways systems—along with the weather-related problems that account for a large number of the delays and the natural peaking tendency found in every travel market. Also, the carriers' use of elapsed flight times as a competitive device aimed at achieving a higher position on CRS displays may have contributed to the problem. Even accounting for these complications, the situation has deteriorated alarmingly. At the 22 busiest airports the Federal Aviation Administration recorded 367,000 delays last year compared to 295,000 during 1985—a 25 percent increase. That's simply too drastic an escalation to chalk off as normal. Moreover, the FAA delay system counts only a fraction of the total delays. DOT launched its own investigation to look into the seriousness of the problem and discovered that not only was the problem widespread but some flights were late 70, 80, 90 or even 100 percent of the time. That is absolutely unacceptable.

Airport and airspace capacity is at a premium and these elements must be expanded to help alleviate the delay problems. Projects like the national airspace system plan being administered by the Federal Aviation Administration will do just that. The NAS plan will increase capacity through the complete modernization of our airspace network. Every significant piece of hardware and software in the air traffic system is being replaced. This program is slightly more than halfway through a 10-year implementation period and more than 90 percent of the NAS plan projects were completed or underway by the last fiscal year. In fact, by next spring, all "en route" traffic control centers will have new computers in operation—computers that are 10 times faster and have four times the capacity of those being replaced. We are also working to increase airspace capacity right now by studying air traffic procedures with an eye on identifying efficiencies that can be applied to reduce delays. In this regard, the FAA revised flight patterns in the busy eastern corridor to provide 10 additional departure paths and three more landing routes for the three major New York area airports, including Newark, a facility which accounted for 25 percent of the Nation's delays in 1986. These revisions have proved highly successful; delays are down at these airports since implementation of the program last February.

In the area of airport capacity, we have proposed and support efforts to focus airport grant funding on projects which have the most potential for enhancing overall system capacity. There are practical limitations, however, to airport and runway expansion. Overburdened facilities are generally located in large metropolitan areas where surrounding development and environmental constraints make expansion very difficult or impossible. In addition, airports and runways are not built overnight.

When all is said and done on the issue of increasing system capacity, management must be recognized as an important facet of our short-and-long-term efforts. It is not unlike a situation many of us tackle every morning. Most arrive at work between 8:00 and 9:00 a.m. That leads to road congestion and the need to manage automobile traffic. Often it simply isn't possible or wise to build new highways, bridges and roads to handle the peak loads of a few hours. It is preferable in the short run to try and smooth out the peaks by shifting some of the discretionary traffic onto off-peak hours.

In fact, the Department of Transportation has initiated a wide program to better manage airport capacity and help reduce delays at the national level. This effort includes ongoing and recently expanded airport scheduling investigations to determine the extent to which airlines are overscheduling during peak hours. Initial studies found a serious problem with overscheduling. At Atlanta Hartsfield Airport we discovered that airlines were scheduling 50 landings and departures between 3:45 and 4:00 p.m., for example, although the airport can efficiently handle fewer than 40 operations on a routine basis during a 15 minute interval. This situation is not unique to Atlanta, and—as a first step toward addressing the problem—last spring the Department encouraged the carriers to meet and adjust summer schedules. Through the cooperation of the participants, the talks brought a shift of about 1,000 flights to less congested time slots at a number of the Nation's busiest airports.

At the end of the summer the Department moved to curb delays again. First, at our urging, the CRS vendors carriers agreed to eliminate elapsed time as a CRS ranking factor on nonstop flights. Then, on August 28th the Department announced that six major carriers had signed agreements to improve their on-time performance for flights to and from Chicago O'Hare, Boston Logan, Dallas/Ft. Worth and Atlanta Hartsfield Airports. Less than a week after these agreements were signed, DOT issued a rule requiring all major airlines to publicly disclose on-time performance and flight cancellation records. This rule requires that on-time performance data be reported by the 14 largest U.S. carriers for service to and from 27 major airports accounting for approximately 1,500 airport pairs covering 66 percent of all domestic scheduled enplanements. However, the 14 carriers have chosen to report on their entire domestic systems, so the public will have performance data on approximately 90 percent of the domestic scheduled enplanements and some 3300 city-pair markets, large and small. I believe this information, which will be issued in report form by DOT on a monthly basis, will prove an important new element allowing consumers to make educated choices on their travel arrangements. We expect the first report to be available in a matter of days.

This rule also requires the affected carriers to provide monthly data on their total number of domestic scheduled-service passengers and the number of mishandled baggage reports filed by these passengers. The Department will publish a summary of the data as part of our monthly consumer report.

Mr. Chairman, we are making headway with correcting the delay problem. Delays as measured by the FAA dropped 41 percent in September compared to figures a year ago. And delays have declined in each of the last three months. For the July to September period, they were down 24 percent. The more complete data in the Department's investigation show that some carriers have begun to make major improvements in their on-time performance for flights to and from the covered airports.

Now I would like to turn my attention to consumer problems in other areas and explain how DOT has responded.

Mr. Chairman, the Department has several mechanisms to protect consumers. Specifically, there are a number of rules such as those on overbookings, refunds and baggage liability that DOT enforces. Also, section 411 of the Federal Aviation Act provides for the investigation of domestic and foreign air carriers, or ticket agents, if there is a reasonable suspicion of unfair or deceptive practices, or unfair methods of competition in the promotion and/or sale of air transportation. Where violations are found, the Department can issue a cease and desist order, assess civil penalties in appropriate cases and propose other remedial actions.

It is the responsibility of several units within the Department to ensure compliance with section 411.

The DOT Aviation Consumer Affairs Office fields complaints in many areas including those relating to air fares. It addresses a variety of issues including: availability, conditions and restrictions, and failure to provide adequate information. Consumer analysts respond to both written and telephone complaints, discussing the details of the problem and providing advice when appropriate.

This Office also handles complaints about advertising. In processing these cases, the analyst may request that the complainant submit a copy of the ad for review by the Investigation Division of the Consumer Office. The analyst will contact the air carrier on behalf of the complainant if the ad raises a question on fares, and an explanation or justification will be sought from the carrier. Where the consumer has made a good faith effort to obtain the desired fare, and the carrier has not adequately represented necessary facts relating to the sale, the analyst will suggest that the carrier resolve the problem by making the requested fare available. It will be further suggested that the carrier alter its approach to the promotion and report back to DOT on plans to resolve the matter. Almost without exception, carriers make the disputed fare available and are generally very receptive to altering promotions. This is all done on an informal basis. Our complaint handling procedures are very efficient. Cases are often resolved within a matter of days of their assignment. Of those opened during calendar year 1986, 98.8% were closed by January 6, 1987.

The Department also monitors air transportation industry advertising independent of the consumer complaint process. The Investigation Division monitors ads from a wide variety of publications on a daily basis. When a specific ad is identified as misleading or deceptive, investigators contact the party by telephone or letter, or both, to alert the company to the problem and attempt to secure a modification of the ad.

At our request, the major airlines have assigned "expeditors" to give special attention to complaints that we refer. Our consumer staffers have frequently been able to bring about settlements on baggage, refund and oversale complaints (among other things) by pointing out a relevant regulation or standard industry practice to these airline contacts.

The assistant general counsel for aviation enforcement and proceedings at the Department also has a role in the consumer protection process. The general counsel's enforcement staff ensures compliance with the law and has a number of avenues that may be pursued to obtain compliance. Cases are referred by either the Consumer Affairs Office or the Investigation Division, or formal complaints may come directly from the general public. To the extent issues can be resolved informally, the staff attorneys will handle matters by phone or letter. Formal enforcement actions, while not often necessary, would normally be pursued through legal action on an administrative level. The result of successful enforcement action would be the issuance of a cease and desist order, civil penalties in some cases, and other remedial action. For your information, during FY 1987 the Department assessed nearly $550,000 in civil penalties for violations of our aviation economic regulations. The bulk of these fines were for violations of our consumer protection rules. This amount was more than twice the prior year's total.

Mr. Chairman, as noted earlier, consumer problems, whether delay-caused or centering on some other area, appear to be primarily related to a "shaking out" of the industry in the wake of airline mergers and acquisitions. During the past few years, almost 70 percent of the industry has been involved in consolidation activities. We think it is likely that problems will be corrected as the affected airlines complete the operational side of their mergers. But we have not left that to chance. In addition to those activities I've described, the Department has taken the following steps to alleviate the difficulties:

Industry Letter: We sent an "industry letter" to carriers reminding them of the Department's consumer rules and policies, warning that, where necessary, we will use our enforcement capabilities to ensure compliance.

Enforcement: Our Investigations and Aviation Enforcement Offices are investigating the consumer service practices of several major airlines and necessary enforcement action will be instituted against airlines which show a pattern of violating our rules.

Evidence Request for Mergers: In the order instituting the USAir-Piedmont merger proceeding, we asked for evidence that the carriers would be able to integrate operations smoothly, so as to avoid consumer problems.

I am pleased to report today that consumer complaints against the airline industry declined dramatically during September. Complaints for the month dropped 23 percent from August. This was the first time since January of 1987 that complaints received by DOT declined. I believe this progress can be credited to increased industry-wide attention to consumer matters as well as to the number of initiatives undertaken by the Department in the last several months. I anticipate that this downward trend will continue.

Mr. Chairman, there is no denying that we have a number of hurdles to jump as the U.S. system adjusts in the new aviation environment. The expansion encouraged by deregulation has thrown us a few curves. It should be noted at this point that while deregulation has been with us for nine years, the explosive growth has come to the system these past four years. The economic downturn of the early 1980's, among other things, held up growth. The difficulties we are experiencing are a relatively recent phenomena. The ability of industry and, where appropriate, Government to "polish and round off" the rougher edges of the restructured aviation system will surely determine the future of our industry.

With all this said, I find it particularly interesting that the number of aviation consumer complaints per 100,000 passengers has actually been lower in the "post-deregulation" period than it was before 1977. From 1971 to 1977, the number of complaints per 100,000 passengers was 6.62; for 1983-86 that number stood at 2.92. While it is true that the complaint numbers are higher for 1987, we must be careful not to dismiss the whole period of deregulation as a consumer's nightmare. That simply isn't the case. It is also interesting that complaints about delayed or canceled flights led all other categories in the pre-deregulation period just as they have since then.

I think it is extreme to take the position that deregulation has been a failure and we must return to the "good old days" of regulation. I believe a studied, reasoned review of the aviation sector will reveal that these are the "good old days" and to deny the advances we have made under regulatory reform would be to deny the consumer the social and economic progress he or she enjoys today.

Mr. Chairman, the very fact that there are more people using an expanding—if imperfect—system indicates that reform has had one desired effect—making air travel available to more people. The problems that have resulted must be solved to maximize the potential of the product. But the fact remains, more people flying more miles on more airlines is a positive result of deregulation.

That concludes my formal statement. Again, thank you for asking me to testify.

QUESTIONS OF THE CHAIRMAN AND THE ANSWERS

AIRLINE DEREGULATION

Question 1. We have seen a number of phases of airline deregulation since 1978. You said that we ought to consider today as being "the good old days" of aviation. What do you see as the next phase of deregulation?

Answer. We envision a period where the airlines incorporate their recent acquisitions and concentrate on providing quality consumer service. We envision carriers attempting to become international in scope as they strive to develop international partnerships and market their products overseas. Competition in the area of computer reservation systems should increase, and carriers will continue to attract passengers away from their competition by developing and marketing their new hub complexes.

Overall, though, we do not envision a significant change in the current structure of the industry. Some smaller carriers, however, may seek to expand their operations either through internal growth or through acquisition of other firms.

Question 2. One concern is that with only a few "mega-carriers," the future of a competitive airline industry could be threatened by a recession and the subsequent bankruptcy of one or more airlines. What plans does DOT have to ensure air service in case a major carrier is, for some unforeseen reason, forced to cease operations?

Answer. We believe that one the major benefits of the recent mergers is that it has improved the ability of many airlines to compete effectively on a nationwide basis. This consideration should enable the industry to withstand the adverse effects of a recession far better than in the past. Similarly, we believe that the current structure of the industry makes it easier for airlines to step in and replace service that may be lost as a result of a cessation. Most city-pair markets receive competitive service (i.e., from two or more carriers). Thus, the cessation of service by one carrier would result in an increase in capacity/service by competing carriers. In those few domestic markets where competition is limited, the cessation of service would lead to entry by a new carrier. Given the fare and route freedoms that exist today, any market that is economically attractive will be served if a carrier fails.

With regard to cessation of service by a carrier operating an international route, DOT has designated a substitute or "backup" carrier as provided for in our bilateral aviation agreements with foreign governments and has the ability to authorize other carriers to serve markets that have been abandoned.

AIRLINE MERGERS

Question 3. You stated that DOT's consideration of airline merger applications has been based on the competitive consequences of those transactions. Yet, several mergers—the Northwest/Republic merger and the TWA-Ozark merger—left a number of cities (Minneapolis; Detroit; Memphis; and St. Louis) without competitive airline service. Why were these mergers approved, even after the Justice Department recommended against their approval? What standard was used?

Answer. The Department's decision in all merger/acquisition cases—including Northwest-Republic and TWA-Ozark—is based on a market-by-market analysis. We analyze each market in which the two merging carriers compete to determine if anticompetitive behavior and performance is possible and sustainable. In making a decision, we place a great deal of emphasis on evaluating whether or not there are entry barriers in a particular market—that is, restrictions on slots, gates, terminal facilities, or any other restrictions that could prevent an established carrier from expanding service or a new entrant from initiating service.

In effect, DOT evaluates air carrier behavior on a market-by-market basis and assesses whether entry barriers could restrict competition. If entry barriers are minimal, we believe that competition—both from established carriers and potential entrants—can nullify in a relatively short period of time the actions of incumbent carriers if they attempt to raise fares or reduce service. This ability of competitors to discipline a dominant carrier at a hub is not a mere theoretical concept. Even major hubs which were affected by mergers have competitors already at those airports. Minneapolis, although Northwest's major hub, is served by 19 carriers. Detroit has 19 carriers, while Memphis has eight and St. Louis three.

We should also point out that DOT's decisions in airline merger cases have not been inconsistent with DOJ's recommendations in the vast majority of cases. DOT has decided 20 major merger cases since "sunset." DOJ has recommended that we disapprove only two of these mergers (Northwest-Republic and TWA-Ozark). It should also be noted that DOT disapproved a merger supported by DOJ (TAC-Eastern).

Question 4. You rely heavily on the Airline Deregulation Act to explain DOT's position on approving airline mergers. If that's the case, should that statute be changed to reflect the fact that reliance on the marketplace has not worked to preserve competition?

Answer. The airline industry remains highly competitive even though several acquisitions have taken place. We have not experienced any significant decline in competition in any region of the country.

Competition in the airline industry does not depend solely on counting the total number of airlines. As a general rule, ease of entry into or exit from a market is a more significant consideration. When entry and exit are relatively easy, the airlines providing service will be compelled to provide competitive fares and service.

DOT has adequate statutory authority to ensure that competition in the airline industry remains vigorous.

Table 1 presents market share information for the majors in 1979 and 1987. Table 2 presents industry concentration data on a yearly basis from 1979 to 1987.

Table 1.—Top 9 air carriers in terms of revenue passenger miles (domestic, scheduled operations) for the 12-month period ending Sept. 30, 1979, and May 31, 1987

Carrier—1979:	*Percent*
United	19.4
American	13.9
Delta	12.0
Eastern	11.4
TWA	10.2
Western	4.7
Braniff	4.6
Continental	4.4
Northwest	4.1
Total	84.7
Carrier—1987:	
Texas Air Corp.	20.7
United	17.7
American	15.1
Delta	12.6
Northwest	8.3
TWA	6.7
USAir	5.2
Piedmont	3.1
Southwest	2.5
Total	91.9

Table 2.—Percent of total industry domestic RPM's for the top 9 carriers

12 months ending Sept. 30:	*Top 9 carriers*
1979	84.6
1981	78.2
1983	78.5
1985	74.3
1986	92.1
1987 [1]	91.9

[1] 12 months ending May 31, 1987.

INDUSTRY CONCENTRATION

Question 5. In the last nine years, the airline inudstry has become much more concentrated than it was prior to deregulation. Today, the eight largest carriers control 93 percent of traffic. Have you taken this into account when considering merger applications? What can be done to improve upon this problem?

Answer. The airline industry is not much more concentrated today than prior to deregulation. In 1979, the nine largest carriers had approximately 85 percent of the domestic market, as measured by revenue passenger miles (RPMs); today, the nine largest carriers have approximately 92 percent of the domestic market. When one looks at competition in city-pair markets, which is how the DOT evaluates mergers, then we see an industry that is far more competitive today than it was under regulation. There has, for example, been a dramatic decline in the number of city-pair markets receiving single-plane service from only one carrier—from 4,093 in October 1978 to 3,449 in October 1987. At the same time, the number of city-pairs receiving competitive service has increased from 1,266 to 1,800.

The DOT does, of course, take into account industry concentration when considering a merger application. The Department examines the impact of a particular merger on competition in each relevant market affected by the acquisition, including the national market. DOT has determined, based on a careful examination of the evidentiary records developed in each proceeding, that none of the mergers it has considered would substantially reduce competition in the national market. The Department's findings in the issue have not been disputed by the parties to these proceedings. In reaching these conclusions, we evaluate each market in which the two merging carriers compete to determine if anticompetitive behavior and performance is possible and sustainable. We place a great deal of emphasis on "functional" analysis. This analysis focused on whether there are entry barriers in a market—that is, restriction on slots, gates, terminal facilities, or any other restriction that could prevent an established carrier from expanding service or a potential entrant from initiating service.

Question 6. In addition to industry-wide competition, those cities serving as hub airports have become dominated by one or two carriers. What is the Department doing to ensure that these major cities continue to receive competitive quality service and reasonable fares?

Answer. Three factors have encouraged "hub dominance"—a trend toward industry consolidation, an airline's desire to strengthen its competitive position at its home base, and certain cost savings that result from hub-and-spoke route networks.

Dominance of a hub airport by one or two carriers does not in and of itself imply a lack of competition. In many instances where two carriers dominate a hub, they compete fiercely for passengers. United and Continental, for instance, are the dominant carriers at Denver but they compete with each other for passengers. There is also a variety of competitive service at large hub airports: As of September 1987, an average of 15.6 air carriers provided service at each of the ten largest hubs.

We believe that the best way to ensure a competitive airline is to work to reduce barriers to entry. Our FY 88 budget proposals, for example, include increased funding for the NAS Plan, as well as funding for an increased air traffic controllers workforce. Moreover, Administrator McArtor's "Impact 88" initiatives emphasize improved controller training, expanded airport capacity, and increased airspace capacity. These increases in the capacity of the airspace system will enable carriers to expand and enter new markets.

CAPACITY RESTRICTIONS

Question 7. You stated that the National Airspace System Plan—the 10-year effort to modernize the air traffic control system—would significantly expand capacity and help alleviate delays. While I agree this is a long term measure, what can be done in the near-term to improve the problems of capacity and its allocation?

Answer. While the full capacity benefits of the National Airspace System Plan are long term, partial benefits will be captured sooner as improvements are made. In addition, the FAA is continually seeking ways to improve capacity and reduce delays through airspace redesign and improvements. Some of these activities are:

Implementation of the Expanded East Coast Plan, which addressed better utilization of airspace, expansion and realignment of routings, additional departure fixes, etc., has been a major contribution to recent delay reductions.

Development of a West Coast Plan similar to the East Coast Plan.

Specialist teams ("tiger teams") to examine specific facilities and recommended long- and short-term actions to improve efficiency.

Other activities which examine the implementation of simultaneous approaches at specific locations, the development of additional arrival and departure fixes where needed, and using traffic management teams to smooth the flow of traffic at multiple airport cities.

Furthermore, there is a continuous reassessment and analysis of congested airports and airspace, including:

FAA's Airport Capacity Program Office Task Forces which evaluate individual airport capacity problems and recommend technically oriented actions to increase capacity such as physical improvements, changes in air traffic control procedures, operational changes including peak period rescheduling.

Use of the SIMMOD airspace and airport simulation model to determine more efficient routings and airspace structuring.

These activities will continue, focusing on those locations and areas where additional capacity is more badly needed. The results of these efforts, while individually limited, have had, and will continue to have, an important, positive impact on system capacity.

Question 8. Given the fact that it will be years before airport development projects and the NAS Plan provide additional capacity, do we need to consider limiting the number of flights as a means of ensuring airline safety?

Answer. The aviation system is currently operating at a safe level. There is no need at this time to limit flights for the purpose of safety. Should a problem arise, actions can be taken at that time to address it.

In the mean time, measures are being carried out which contribute to the safety of the system. Airline flights are currently operating under Flow Control so that traffic in the en route environment does not exceed operationally acceptable levels and controller capabilities. It allows specific variables to be taken into consideration at the time of any potential overload. This approach ensures that flights are limited, where necessary, to ensure the safety operation of the system while continuing to get maximum productivity from existing capacity.

Question 9. The question of how capacity is allocated is going to be one of the major issues during the next few years. How do you think access to our major airports should be allocated?

Answer. I believe the focus should be on meeting the demand rather than on allocating scarce capacity. There are a number of steps which can be taken to expand capacity physically and to extract greater capacity from existing facilities and equipment. These include the kinds of technical and procedural activities described in the earlier answers. In addition, the discussions, delay investigations and regulations that the Department has undertaken have resulted in some scheduling adjustments that have effectively expanded capacity by allowing a more efficient use of the airport and airways facilities. Moreover, we do have airport and airways programs which are investing billions of dollars with a major objective of increasing system capacity.

The active allocation of capacity assumes some firm limitations on activity levels. Limiting activity leads inherently to a type of regulation of the industry and is, therefore, a step which should be avoided if at all possible.

AIRPORT SLOTS

Question 10. In December 1985, DOT issued a final rule allowing the airlines to buy and sell airport slots at four airports. Given the recent problems of small carriers to gain access to these capacity controlled airports, do you believe this rule has worked as planned? Should that rule be abandoned?

Answer. We believe that the buy/sell rule is working. The major objective of the buy/sell policy is to provide a means by which slot holdings can be adjusted in response to market signals without extensive government involvement. The rule is working well with regard to this objective. There has been a great deal of activity under this rule, predominately involving time-limited sales or leases. This activity indicates that slot holdings are moving in response to changes in markets. The prominence of short-term sales and leases indicates that, not only are long-term, major market changes being accommodated, but that the rule is allowing adjustments even to short-term market changes, thus further increasing the efficiency of the system.

With regard to improving the buy/sell regulation, we are reexamining the rule in the context of a petition for reallocation of slots at LaGuardia and National Airports filed by American West Airlines. It is a complex matter, and we are still involved in that analysis. If we can find ways to make the rule more effective, we will certainly pursue them. However, in view of the petition, which is still under consideration, we cannot comment further at this time.

AIRLINE DELAYS

Question 11. You inferred that because airline delays have declined over the past three months, the problem is going away. What plans does the Department have to handle delays and consumer problems during the holiday travel season—not to mention next summer?

Answer. Given reasonably benign weather over the coming holiday season, we believe that the combination of scheduling actions taken by the carriers and procedural and technical changes initiated by the FAA will allow the traffic for the holidays to be handled without inordinately high levels of delay.

For next summer and beyond we will be continuing to bring on line improved equipment and to implement more efficient procedures that can be identified through analysis of the airport and airways system. In addition, we will be analyzing data from the scheduling practices investigation and from the disclosure rule to see how changes in traffic flow might result in fewer delays.

COMPUTER RESERVATION SYSTEM

Question 12. One of the growing problems in the airline industry is the role computer reservation systems play in the marketing of tickets. Some have said that these systems should be divested from the airline companies. What is your view of divestiture?

Answer. In a 1985 study the Department of Justice concluded that the potential benefits of divestiture to be insufficient to justify the potential loss of economic efficiency that would result if these systems were divested from their airline owners.

DOT is now studying the CRS industry. When our study is completed, which will be early next year, we will be in a better position to evaluate what remedial action, if any, the Department should adopt regarding the CRS industry and vendor practices.

FREQUENT FLYER PROGRAMS

Question 13. You stated that the development of frequent flyer programs have been a positive result of deregulation. Have frequent flyer programs limited competition from new entrants—as they encourage travelers to overlook possibly lower fares that less established airlines can provide?

Answer. Under deregulation, many new marketing programs have been adopted in the airline industry. Frequent flyer programs are a marketing innovation, as are deep-discount pricing, off-peak pricing, and marketing alliances and code-sharing arrangements between major and regional air carriers, to name only a few. Unless a marketing practice is anticompetitive, we believe that in a deregulated environment airlines should have the opportunity to offer customers the widest range of fares and services.

QUESTIONS OF SENATOR PRESSLER AND THE ANSWERS

Question 1. I recently heard that flight delays and service problems have gradually decreased in the last few months. In addition, consumer complaints to the Department of Transportation concerning airline service problems are also somewhat on the decline. I would be very interested to see the statistics regarding these complaints and problems from prederegulation days down to the present. Would you please provide these comparative statistics for the record?

Answer. While some pre-deregulation data on delays and complaints exist, it has never been compiled into usable form because it is not comparable to the data that we now keep. The noncomparability is caused by a number of definitional changes over time—for instance, delays were once defined as a deviation of thirty minutes from schedule, rather than fifteen minutes as now defined. In general, however, I suspect that delays and complaints are higher recently than in the prederegulation era. However, it must also be recognized that deregulation resulted in a rapid growth in traffic, as well as changes in airline ownership. Both of these factors have generated substantial benefits to the traveling public, in addition to the problems which arose.

AIR SERVICE IMPROVEMENTS

Question 2. If it is true that improvements in these areas are beginning to take place, what will be the Department's approach to further impove air service conditions?

Answer. Since we do not believe that we have accomplished all that can be done under our existing initiatives, the Department's principal approach will be to continue to apply the steps only recently begun. In addition, the FAA will be continuing to bring on-line the National Airspace System Plan, which will provide additional system capacity; administer the Airport Improvement Program to expand airport capacity; and implement airspace improvements to utilize more efficiently the existing capacity. Moreover, we will be analyzing the information that we are now receiving under our delay investigation and consumer rule authorities to see where additional improvements might be made.

ESSENTIAL AIR SERVICE PROGRAM

Question 3. As you may know, the Senate recently passed legislation to extend and improve the Essential Air Service Program. What commitment can you give me that the Department will carry out this legislation in the manner intended—that is, to improve air transportation to our smaller communities and rural areas?

Answer. The Department has faithfully and effectively administered the Essential Air Service Program since the sunset of the Civil Aeronautics Board. We have done so, even though it has been the Department's position that the program should be terminated by Congress since it has achieved its objective of allowing a transition period for small communities to adjust to deregulation. Should the program be extended, the Department will continue to fully meet its obligation to effectively administer the program as required by law.

The **CHAIRMAN**. Dr. Kahn.

We welcome to the committee our friend the father of deregulation, Dr. Alfred Kahn, who is the Julius Thorne Professor of Political Economy at Cornell University.

STATEMENT OF DR. ALFRED KAHN, FORMER CHAIRMAN, CIVIL AERONAUTICS BOARD

Dr. KAHN. I hope you have a bulletproof shield here.

The CHAIRMAN. We know you do not need that. You can take care of yourself. But we would like to hear it. We would be glad to hear from you now. So if you can summarize your statement for us, Dr. Kahn, it would be appreciated.

Dr. KAHN. I will try to do that very briefly.

The CHAIRMAN. Because you see the interest we have, and the number of other witnesses this morning.

Dr. KAHN. Of course, with the understanding that you will put the whole thing in the record, I will summarize it very quickly.

The CHAIRMAN. The statement in its entirety will be included.

Dr. KAHN. I am really pleased to be here. I am honored by your invitation.

We have had nine full years of experience with airline deregulation. Actually, we have had something more like 12 because we really began to deregulate in 1976, before even I became Chairman of the CAB. And I want to urge on you three major conclusions on the basis of that experience.

The first is, in my judgment, that airline deregulation has been a success; that it has brought to the overwhelming majority of travelers—and I will get to the minority before I am through—in abundant measure most of the benefits we expected; that second, however, the enormous expansion of air travel that it has encouraged has given rise to a lot of problems, congestion, delay, mistreatment of customers, uncertainty about safety. And I am delighted that Congress is looking at them.

Third, undoubtedly these problems have been exacerbated by the competition that deregulation unleashed, and the enormous increase in travel that it encouraged. But the principal responsibility for these problems rests in failures on the part of government, primarily the Federal Government, to fulfill its responsibilities.

And so the solution is not to go back to the old regime of protectionist, anticompetitive regulation, but for the government to do a better job of what it should never have stopped doing.

If we turn to the benefits of deregulation, I think they are fairly obvious. The first, of course, is reduced fares, and I am talking now about averages, which means it includes everybody in the United States. That is the nature of averages. Between 1976, which was the last year before we really began to let discount fares come in, and 1986, average yields in real terms have gone down 28½ percent. If they had merely remained constant, that means that the people who traveled in 1986 would have paid $15 billion more for those tickets. And those benefits have been very widely distributed. Last year 90 percent of all travelers traveled on discount tickets, 90 percent. That is almost everybody, at an average discount of 61 percent from the coach fare.

Now, of course, there are important qualifications. First of all, the very low yields in 1986 are probably not sustainable. The industry as a whole lost money. And yields are already moving back to 1985, toward 1985 levels. But that still represents an $11 billion annual saving.

Second, the industry has become more concentrated at the national level because of mergers and airline failures, and that means in my judgment that price competition may well become less severe in the years ahead. But the important concentration figures are not at the national level but at individual routes, and since airline deregulation took off all the restrictions on who might fly where, today carriers are free to enter any markets they want to, and the result apparently has been a substantial decrease in the concentration per route on average. There are more carriers on average serving individual routes than before.

But this reconcentration also, in my view, reflects a deplorable failure of the Department of Transportation to disallow a single merger. Now, I know Mr. Scocozza talks about disallowing one which they then turned around and allowed with restrictions. That was one case in which they imposed restrictions, even though several of the recent mergers have clearly suppressed competition between the merging parties.

In any event, the industry today is still far more competitive than it was under regulation. Let's not forget that. Because of deregulation, every carrier is now potentially a competitor of every other one, and that competition is real and active. And Mr. Scocozza quite correctly pointed to the invasion of the east coast markets by American recently and United with its new hub at Dulles Airport.

I must admit, of course, that the benefits of this price competition have been unevenly distributed geographically. Yields are definitely higher on thinly traveled than on densely traveled routes. Those differences are not entirely discriminatory. It really costs more per passenger and per mile to supply service on short hops than long hops, on thin routes in small planes than on big planes, and it is more costly to give business travelers the kind of service they want.

Now, the price wars that have occurred on the dense routes have, of course, brought enormous benefits to travelers there. But the notion that travelers on other routes are overcharged because of that is simply irrational. There is a general feeling that the travelers on the thin routes are subsidizing the ones on the long routes, that their fares are higher than they would otherwise be because carriers are turning around and raising fares there because they are competing on other routes.

First of all, they are not the same carriers most of the time. The high fares are generally by commuter carriers, relatively local carriers on small routes. There is no reason why if American and United and Continental are cutting each other's throats between New York and L.A., that therefore Empire Airlines should raise fares between Ithaca, New York and Washington. They are different airlines.

Second, it is irrational. There is no reason to believe that carriers will be charging less than the best price they can get on the thin routes, and only then because their reduce their fares elsewhere do they turn around and raise them. They must have been eleemosynary institutions before if they were not charging what the traffic would bear.

So the notion of subsidization and cross-subsidization and recovery is simply economically irrational. In fact, if the introduction of intense price competition on some routes has any effect on the others, it usually is to make them spread.

SuperSavers started between New York and L.A. Before we were through, every major city in the United States—Ithaca, New York, where I live, 25,000 population, has SuperSavers, and part of the reason is that if I do not like the fares there, I can drive to Syracuse, 55 miles away, and have access to six different carriers.

Now, I am not saying that competition is uniformly and sufficiently effective everywhere. If I lived in a small community paying high fares, I would scream. All I can say is that it would be totally irrational for Congress to respond to that by going back to regulation that was practiced between 1938 and 1978, because it totally and thoroughly suppressed all price competition.

I will skip the second major contribution, which is productivity, and perhaps just list the ways in which I think government has been delinquent. I gather that you would like me to do so, Mr. Chairman. I am sure you will ask questions which will give me a chance to say everything else that I left out.

Quality of service. First of all, I am sure everybody is aware that accidents have gone down 35 to 40 percent per million flights. That doesn't mean that the margin of safety may not be narrowing, but the answer is bigger budgets for the FAA. I have no reason to doubt the popular impression that the FAA has been lamentably unaggressive in demanding larger budgets and hiring more inspectors, in bringing up its air traffic controllers roster.

Number two, thanks partly to the essential air service program, not a single community that enjoyed a minimum level of certificated service before deregulation has lost it, not a single community, and it happens that I am in favor of continuation of the essential air services program.

Third, I have talked about the failure to enforce the antitrust laws.

Number four, when you have congestion, it means you have not expanded capacity. It is simply absurd. Air space is getting more and more scarce because demand is exceeding supply. It is absurd that we have $5.7 billion accumulated in the Airport and Airways Trust Fund. We should be expanding the capacity. The government is not doing its job.

Finally, and this I think is going to fit with a lot of the questions that were asked poor Mr. Scocozza, we are talking about very valuable space. That land at Washington National Airport is terribly valuable. It is like Rembrandt paintings or Picasso drawings. There is nothing in the Constitution, in the Ninth Amendment, I believe—and Judge Bork I am sure would agree with me—that says that people have a right in the Bill of Rights to land at Washington National Airport, no matter how few they are, no matter how small their planes, when if they do so they are keeping out hundreds or even thousands of other people.

We should be pricing those slots correctly. We should not be giving them away free. We should be charging thousands of dollars at the time, just as we do for Picasso paintings, things that are really valuable, charging thousands of dollars for people to land. That may raise the fares $25 and $50 for the people who really think it is important to land there, use the funds to subsidize landings off-peak at other airports and to expand capacity, and give people bargains to do it there.

Last sentence and I am through. I think it would be terribly ironic if, by our failure to understand that the problem is not deregulation, the problem is the failure of government to do all the things that it should be doing, it would be tragic if we were to return to the policies of protectionism and central planning just when benighted countries like China and the Soviet Union and Chile and Australia and New Zealand and France and Spain and Portugal are all discovering the superiority of a free market economy.

Thank you very much.

The CHAIRMAN. Listening to you is like drinking water out of a fire hydrant.

Let me say this, Dr. Kahn. I am trying to keep track of these things. I agree that it is very valuable at National, and the reason is it is restricted. Obviously as the Secretary just has attested, there are only handling about 37 landings and takeoffs an hour at National. Therefore we had on the matter of safety when you were head of the CAB and the perimeter rules, where America West was precluded from landing there with anything that came from further than 1,000 miles. First it was 500, you remember, and there was some political maneuvering by a former subcommittee chairman, Senator Long, who got in New Orleans down there and extended the mileage. But it was illegal because of the matter of safety and there could not be any more allowed.

So they thought fine, we will build Dulles and let everybody else who wants to begin service there.

So I will agree with you. But "right," you do not have a right but yet, the solution you say on dollars just does not necessarily respond. I do not think the Congress believes that there ought to be that kind of monopolistic financial controls specifically on the slots.

I hate to relate it top my own case, but it is not unusual because I have talked to many other Senators—you have Senator Danforth, we can put in the record that the various places, St. Louis, Denver, Detroit, the limited service, the concentration of control. In 1966, I had three flights up to National Airport on National Air Lines and three back, It was always filled going back and forth. Then Pan Am took over National. Later, it got into financial difficulties and sold those slots to Air Florida. They then crashed and sold those same slots to help satisfy their financial problems. Thats how I have lost those slots, and my convenience and necessity.

Now you come back and tell me what I had 20 years ago was a fine thing, but that I ought to have to buy those slots back. I do not believe we want to do that. And to say that it is irrational, I think of that definition of the economist who thinks that everything that is working in practice, in real life, wonders whether it will work in theory.

I can tell you, but most respectfully, that statement is irrational for the simple reason that it has gone up. It has quadrupled. I do not have the service. I know people from Columbia now just on that little commuter, going on up to Charlotte. Yet, they drive because it costs too much to fly.

He gave an example, which is a rare example about everybody going out to Vale, Colorado or someplace like that, or Aspen to ski, and uses that as the commuter statistic of success. But that is not the case at all. The commuters are not going in, and in fact, avoid the hub, the delay, the lack of service. Then many times if it does not come through from Chicago to Charlotte, North Carolina, they give me a car and a phone and a half hour bus ride down to Charleston. Well, you get tired of doing that, so you say it is better to go all the way out to Baltimore.

I know what is rational and irrational. Service has gone down. The price has quadrupled. There is a subsidization by 85 percent of the medium, small sized commuters for your large number of travelers, the shuttle service to New York and Boston.

But answer this for me. What is it you say that the government—you do not want reregulation—ought to be doing or what is it we should not have stopped doing?

What is that? Elaborate on that for me.

Dr. KAHN. Number one, enforce the antitrust laws, prevent mergers which suppress competition.

The CHAIRMAN. Well, how do you do it now? I mean, let's take each one at a time. That is why I favored the last merger. I was going to oppose them and oppose them, but then when you got down to the point where Piedmont was forced to merge—it has been an excellently, well-run airline in my particular area. I know it intimately. But due to the other mergers, they were forced to merge. They still do not control a majority of the slots, as the merger will show. We had to merge in order to compete.

Dr. KAHN. I do not believe it for a minute.

The CHAIRMAN. That is the real danger that we are seeing. We are ending up with seven or eight airlines. Where is that statistic that we had here earlier?

In 1978 you had the top eight carriers with 81.5 percent of all traffic. Now, in 1987, you have got the top eight carriers controlling 92.5 percent. And give us about two or three more years, you are going to have about five that are going to control it all. Then only Charlotte will be served, which I used to have Eastern and Delta and Piedmont, by only Piedmont. You are going to have only TWA at St. Louis. And you look at this thing, and I am trying to get the big trend from you, rather than the cheerleading talk about a grand success, because we all know that is not necessarily the case. That is not necessarily the case at all.

You can give all of these economic little studies and statistical ambits, but I can tell you here and now, we are headed to monopoly control. Yet, you cannot do away with the mergers now.

So what are we going to do?

Dr. KAHN. Well, first of all, I have to disagree with you when in fact passengers last year saved $11 billion to $15 billion, and that is everybody, it is just absurd just to say it is a failure.

Now, it is equally absurd to say that there are not problems. Please do not get me wrong. Of course I agree with you about that.

But what I am saying is this. I live in Ithaca, New York. That is 25,000 population. I lost the ability to fly directly to Washington National. But how can I have the right with 25 other people to claim space at National that would otherwise be taken up by 300 people? It is only sensible that if I insist on flying to Washington National, I have to go to Syracuse. I take a flight to Syracuse, and I get on a bigger plane, so we make more efficient use of that space. It is very valuable space.

The CHAIRMAN. Well, I am not worried about that slot. You and I are generally agreed on that. But I am talking about the concentration in the service and then controlling the price, because these prices go up. I have seen mine go up, up and away. I do not see all of those economies of scale that you are talking about.

Dr. KAHN. I understand. Second, of course, it is not fair to come to me if this administration has not enforced the antitrust laws and say now they have left it in this stinking situation, what are you going to do about it Fred? I am going to fire them. That is what I am going to do first.

The CHAIRMAN. Well, suppose you were in charge tomorrow morning. What could you do? You cannot just dissolve the mergers?

Dr. KAHN. No. I fear that it is too late, though I do not believe for a minute that——

The CHAIRMAN. Well, all right. You and I admit it is too late. So then, what are we going to do?

Dr. KAHN. Well, I think eventually, if it gets bad enough, and I am not convinced that it is, but I think it is the job of the Department of Transportation to keep track of these fares. It is not the job of a Senator to tell somebody in the Department of Transportation what the fares are. They should be keeping track of it all the time.

Do you know, when we were deregulating, there was a provision in the bill that any route that had only one carrier with 90 percent of the business would not have upward fare flexibility, and I testified——

The CHAIRMAN. Well, do you think that kind of rule ought to—that is reregulation. I do not think when you say—and I will agree, we are not going to be able to reregulate and unscramble the entire egg. But limited reregulation—Now, let's say that particular little rule where they have 90 percent of the business, that they are not allowed then to increase their fares, do you think that ought to be a rule of the Department of Transportation?

Dr. KAHN. I am not there—excuse me, I am not there yet.

The CHAIRMAN. I know you are not, but I am trying to get what——

Dr. KAHN. But I think it is—I do not reject it.

The CHAIRMAN. Suppose you were. Suppose I appointed you tomorrow morning, would you put that rule in?

Dr. KAHN. I would first of all find out better than I now know what really has happened to those fares, and we do not know, particularly the yields. You have to know what the average amount is that people pay.

But if I found that people were really being exploited monopolistically, I would be happy to consider putting on ceilings.

Now, I emphasize ceilings because that is very different from what regulation was. Regulation prevented competition. It put floors under prices. It prevented people getting the benefits, which I think are real, of competition. But there is a point at which if monopoly is bad enough, the public may say we need protection.

The CHAIRMAN. I apologize to my colleagues. I am trying to get mergers and put in ceilings, study the fares. I take it now they have not studied the fares very closely because they felt they had no power to do anything about whatever they studied and found out about.

Dr. KAHN. No, but they can tell you.

The CHAIRMAN. Is there anything else that the government should be doing, you say, rather than just going to protectionist?

Dr. KAHN. Expand airport capacity, and that means expand the capacity of existing airports as well as build new airports. We are paying for it.

The CHAIRMAN. Well, Senators Ford and Kassebaum have been leading the way. We put a $15.6 billion airport and airway funding bill through the Senate last week.

Dr. KAHN. Well, that is fine.

The CHAIRMAN. We agree with you on that, on the expansion.

Dr. KAHN. All right. Number four, price airport slots the way the airlines themselves vary their prices, from on peak to off peak, the way our telephone company does, the way hotels do. People who insist on flying between National Airport and LaGuardia at 9:00 in the morning or 5:00 in the afternoon, and who want better quality service, who want delay-free travel, should have the ability to pay for it and get it. And what we should do, if we would simply raise those fares to what it really—I mean, the landing fees or access to the air traffic control, and use the dollars elsewhere to have very low fares to Dulles. Boston, Logan Airport Authority was asking for the same thing. Then we would take care of the people to whom time is not so important, and give them bargains, and they would happily go to Baltimore International or to Dulles. So that is intelligent pricing.

Fifth, of course, Congress—or is it sixth—Congress has already done some very good things on consumer protection. We never intended that airlines should be able to lie to people. We never intended that they should say you have a reservation, but then when they come there they say, I am sorry, you do not have a reservation.

As we were deregulating we put in our bumping rules. I put those in. And those rules say you may not tell people that they have to get off, you have to bribe them to get off. And it is the most wonderful thing. You have usually a surplus of volunteers. People come with starting blocks so that they can get out of the gate fastest to get the bribes.

Well, that is just consumer protection, and the government should never have gotten out of that business.

The CHAIRMAN. I apologize.

Senator McCain?

Senator McCAIN. Thank you, Mr. Chairman. It has been very enlightening and entertaining, as always.

Dr. Kahn, I read your statement very carefully a couple of times, and I want to say that I think it is one of the best and most concise depictions of the situation as it is today, both the good and bad aspects of deregulation.

Dr. KAHN. Thank you.

Senator McCAIN. And I wish every American would have the opportunity, particularly air traveler, would have the opportunity to read it because I think it would lead to a much greater understanding of both the progress we have made and the dilemmas that we face.

I also share your view as far as this business of the slots is concerned in one respect, and that is that we need more runways to land on and we had expansion both of existing airports as well as the construction of new airports. I believe it has been 12 years since the last new airport was constructed, and if we had spent that $5.7 billion that now exists in the trust fund, we would not be in the serious situation we are today. I think it is disgraceful that both the administration and the Congress have failed to spend these monies for the flimsiest of reasons, for a smoke-and-mirrors act to try and convince the American people that we are addressing the deficit.

I would like to focus with you for a minute on an issue that has surfaced over and over again during this hearing, particularly with the previous witness, and as Senator Ford stated, it is a five letter word, slots. I understand your statement, where you said, and you just stated again, that we should start charging for takeoffs and landings that are the most desirable and use that method as a way of putting the marketplace into effect.

How would that allow Hollings Airline from Charleston, South Carolina the ability to compete pricewise with United and American that now not only have those slots but can afford to pay large amounts of money, unlike smaller and emerging airlines? How do we account for that?

Dr. KAHN. Well, I think that if we do it through landing fees we overcome the present problem. The present problem is, of course, that wealthy airlines accumulate a lot of slots. They got them free, but now they accumulate them.

Senator McCAIN. By the way, should they be able to sell those slots that they acquired for free?

Dr. KAHN. Well, I am not opposed to them buying and selling them if that is all we do. It is better than having them own them and not being able to buy and sell them. But I much prefer that those rents, what economists call the scarcity value of those airports, be appropriated by the public and used for public purposes.

Now, you could do it by auctioning, but that again would mean that Hollings Airlines would have to put up a lot of bucks in advance. By the way, now, even if they had the bucks, nobody is going to sell to a competitor.

Senator McCAIN. Absolutely.

Dr. KAHN. But if you raise the landing fees, even a great big plane lands at National Airport, I think it is about $700, and you know, I called my charter operator, and he said it would cost him between $2.75 and $6.00 to land at Washington National Airport. Now, that is crazy. No wonder demand exceeds the supply.

If, now, you had the landing fees go up, say $1,000 or several, $10,000, and that translated into higher prices per ticket, and it would because it would be a variable cost of landing at that time, then there is no reason why Hollings Airline or anybody else could not compete on an even basis by simply saying, look, we are all paying the same price, just as we pay the same wages, we pay the same price for fuel, and we are willing to give you this very good service in which, if the weather is good, we can assure you that you will not be delayed. I think that is the way to restore competitive equality.

Senator McCAIN. But would the deep pockets airlines not be much better able to afford this than would the newer ones and those with less assets?

Dr. KAHN. Well, I do not see how they would. They would have to get it back. I mean, they are not charitable institutions. They would have to get it back in the fares that they charge. What you would be doing would be uniformly increasing the price to everybody, big, small, new, and old for landing at that particular time and place because what passengers are getting there is a high quality product, something that is very scarce. But they would all have that higher cost.

Senator McCAIN. I understand that, Doctor, and I do not mean to beat this issue too hard, but if one of the major airlines was able to secure those slots by paying more money than it would be profitable for them to spend in order to lock up that particular airport, then over time the smaller airlines go out of business because they simply cannot land there. If at the same time we are seeing a trend toward consolidation of the airlines, then the airline that controls the landing slot can raise its fee and basically fix prices.

Dr. KAHN. Well, what you are describing, Congressman, is the possibility that the airlines, the big ones, may engage in some sort of predatory tactics, and that is a kind of predatory tactic. You lose money, you pay a lot in order to have the slots in the hope of driving out your competitors and then being able to raise you prices.

I happen to be one of the few economists in the country who still believes there is such a thing, that it really is a danger. In the week that I gave up my job as Chairman of the Civil Aeronautics Board, in a moment of insanity, I sent a memorandum to all of my fellow board members because we were just on the verge of opening up the transcontinental market to World and Capital, and they were going to charge $99 one way, and the regular fare was either $250 or $300 one way, and I said, we have to be thinking about whether we should put limits on the competitive response of the established carriers because if we do not, sure as anything you know, they are going to come down from the $250 or the $300 to $99, and hold it there——

Senator McCAIN. Until they go out of business.

Dr. KAHN. In fact, I remember a case where Northwest went under and held it there for better service than People Express, until they drive those people out, and then sit around and wait for World and Capital to come back in.

Now, partly the problem is that the Department of Transportation bought hook, line and sinker the idea that airline markets are perfectly contestable. It is like opening a hole in a stream. The minute the fare goes up two bits, whoosh, competitors will pour in.

Well, how many times are they going to pour in when they look at the field there and they see that all the previous ones are dead?

So that I believe that some—it is a very difficult one to decide what is predation and what is just real competition, but when you have an Antitrust Division, the leaders of which say there is no such thing as predation, it would be irrational for a carrier to do that, then the field is wide open. It is like the problem with computerized reservation systems. That is a very difficult problem, and I do not pretend to have the answer, but I would like to see an Antitrust Division that is more sensitive to preserving equal competitive opportunities for smaller competitors, and I am not convinced that even today, even with the alleged elimination of bias in the displays, that ownership by a big carrier of the computerized reservation system does not give it unfair competitive advantages over others.

Senator McCAIN. Well, thank you, Doctor.

But in all due respect, you kind of make my argument here.

Dr. KAHN. I was not arguing with you.

Senator McCAIN. I am afraid that if the big airlines pay additional funds for slots, they will control those slots and the smaller airlines will out of business. Then the only antitrust action we can take is to fine the airlines or do something that really is not very helpful to those small airlines that have gone out of business.

I think you are on the right track here, but I think we might have to add some kind of or see some kind of rulemaking that does allow an opportunity for the smaller airlines to compete for these slots. And very honestly, I do not know the answer.

Dr. KAHN. I understand, and you are dealing with a real problem. I do genuinely believe, however, that if the major air carrier paid those prices for the slots and then clearly charged less for its tickets for a long period of time than its variable costs, including the cost of the slot, were, that then you would have a clearly identified case of predation, and darn it, the Department of Justice then should come down hard on them.

I am very much opposed to saying, well here is an airline we want to let in, so let's let them in the tent, let's give them preferential, throw them a few bones. That is not my idea of competition either.

Senator McCAIN. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Kassebaum?

Senator KASSEBAUM. Dr. Kahn, I am a little confused, following on this debate a moment, about the landing fees and slots because those are two different issues to a certain extent, are they not? I mean, you are saying increase the landing fees which I have always thought was a wise approach, actually, to spreading out the peaks and valleys of the pressure on the system.

Dr. KAHN. Exactly.

Senator **Kassebaum**. So that you would pay more to fly, as you say, at 9:00 in the morning or 6:00 in the evening than 2:00 in the afternoon.

But how does that help open up slots at a high density airport like National?

Dr. **Kahn**. Well, the slot is the right to take off and land. At present, carriers who have it own it, and it is worth a great deal. They make a lot of money now because you have many—you try to get discount fares at 9:00 o'clock in the morning between LaGuardia and D.C. and you are going to whistle for a long time. So they clearly are making money now from it.

All I am saying is that that slot, which is a right to take off and land, does not belong to them, should not belong to them. It should belong to the public and the airports, and therefore you should charge for it so that the landing fees—and raising them sufficiently when slots are scarce—is a way of intelligently rationing access to the right to take off and land at that time, and generates a lot of money which you get in a competitive market, which money should then be used to expand capacity and to subsidize off-peak airports.

Senator **Kassebaum**. I see what you are saying. I think that may apply to your observation, if it works in real life, will it work in theory, or vice versa, because I just do not believe that a smaller airline wishing to get into markets will be able to compete with the larger carriers to pay the higher fares for the better landing time.

Dr. **Kahn**. But if it costs them $20,000 to mount a flight with the fuel that they purchase and the labor that they hire, and you say now it costs $30,000, but to everybody uniformly, we know fares will go up—and I do not mean to say that this is like the telephone company, but that is what the telephone company does, that is what hotels do, it just makes sense at times when things are scarce to raise the price uniformly to all competitors.

Senator **Kassebaum**. Well, I have always thought it was worth trying, anyway, in order to relieve some of the pressure in the system as much as anything else.

But I am also interested in another issue. Were you implying that at National, for instance, general aviation should not be taking up as much space?

Dr. **Kahn**. I am not a regulator. I would not say fewer general aviation flights should land there. What I would say is that the space that you are taking up, Lear Jet, is worth $10,000. That is what other people are willing to pay for it. If you are willing to pay $10,000 for two corporate executives to take the place of 300 other people, pay it. That is fine. I believe in a market system.

I do not believe in Rembrandt stamps—like food stamps—equal distribution of really valuable things unless it is food or shelter. And so in that case, if they pay it, that is fine. But of course, I know perfectly well that if they were to pay the costs that they really impose on the system by squeezing out other people who would like to be there, not to mention all the other costs that the government incurs to take care of general aviation that they are not paying, then they would no longer land at National, and they would go and seek out other places to land because I do not think in that case, if they are not even willing to pay for it, why should we preserve for them the right to land at National Airport?

Senator **Kassebaum**. Well, I think that is a very interesting observation, but I come from the headquarters of Beech, Cessna and Gates-Lear Jet.

Dr. **Kahn**. I understand. If I cannot say that to you, whom can I say it to?

Senator **Kassebaum**. I am not going to pursue this any further, but I do think that we have all along argued that we need to strengthen the satellite airports, whether it is in Chicago or Washington or New York. But I think none of us could really quarrel with some of the observations you make, and I guess that as we have said before, some of the options may be closing. That is why I think these hearings are very important for us to analyze what we possibly can still do to help preserve the direction you launched us on in 1978.

Thank you.

The **Chairman**. Yes, we thank you very, very much, Doctor.

Is there anything else that you see the government should be doing that it stopped doing once we went to deregulation? I mean, you have touched on four or five points.

Dr. **Kahn**. I remember one of my children hearing me give a lecture, and she said, did you have to say everything? I think I have listed all the ways in which I think the government has failed.

The **Chairman**. Very good. I appreciate it. I agree with your daughter.

Thank you very much.

Very good. We really do appreciate your testimony. It is very important. You are the only fellow that comes around here that unsettles our mind and stimulates our intellect, and I really mean that.

Dr. **Kahn**. That is because I have tenure at Cornell University.

The **Chairman**. Yes, sir.

[The statement follows:]

STATEMENT OF DR. ALFRED E. KAHN [1]

Mr. Chairman and members of the Subcommittee: I'm deeply grateful for your invitation to testify before you about the way in which airline deregulation has worked over the last nine years—both its accomplishments and the problems that have emerged—and about what if anything Congress ought to be doing to improve matters.

I need hardly tell you how important these hearings are. The deregulation of the airlines, almost exactly nine years ago, was a dramatic change in our government economic policy, the effects of which extended far beyond that industry alone. Had we not done what we did in that case, we would probably not have proceeded essentially to deregulate trucking, the railroads and buses, or continued along the path of deregulating many of our other basic industries. How Congress assesses and reacts to the airline experience is likely to have similarly wide-ranging effects that go far beyond this industry.

This is all the more so because there is fairly widespread dissatisfaction with the industry's performance in recent years. In these circumstances it is vitally important for us to understand the sources of those dissatisfactions, to the extent they are justified; if our diagnosis is wrong, so is the prescription likely to be.

My own conclusions, based on continuous observation of the industry over the last nine years, are the following:

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[1] Robert Julius Thorne Professor of Political Economy, Cornell University; Special Consultant to National Economic Research Associates; Chairman of the Civil Aeronautics Board, 1977–78; and Advisor to the President on Inflation, 1978–80.

1. The first and most important is that airline deregulation has been a success. It has brought to the overwhelming majority of travelers, in abundant measure, most of the benefits that we expected of it.

2. The enormous expansion of air travel that it has encouraged has, however, given rise to a number of problems—notably congestion, delay, mistreatment of customers, and uncertainty about safety—that urgently cry out for at least some of the remedies Congress has been devising during the last several months. It cries out especially for the longer-term scrutiny on which your Committee has now embarked.

3. If we are to resolve these problems, it is of the utmost urgency that we understand exactly where responsibility for them lies. While, undeniably, they have been exacerbated by the intense competition that deregulation unleashed and by the enormous response of the traveling public to lower fares, it would be a profound mistake to regard them as failures of deregulation: on the contrary, they are the principal manifestations of its success.

4. The principal failures, by far, have been failures on the part of government—primarily the Federal government—to fulfill its responsibilities. I refer to responsibilities that we, in deregulating this industry, never intended government to abdicate: on the contrary, when we were deregulating, we urged other agencies of the Federal government at that very time to recognize these possible problems and prepare themselves to respond to them. In short, as Congressman Barney Frank put it in a speech in Congress some months ago, what we intended then, and is still urgently called for now, was "deregulation, not abdication."

5. I urge Congress, therefore, to insist that the Federal government do its job. If we are to preserve for the traveling public the enormous benefits that deregulation has brought it, what is called for is not a return to the old regime of protectionist and anti-competitive regulation but for government to do more vigorously, imaginatively and effectively what it should never have stopped doing.

THE BENEFITS OF DEREGULATION

From the standpoint of the traveling public and of the American economy generally, the two most important consequences of deregulation have been low fares and improved productivity.

Fares

Between 1976 and 1986, average yields per passenger mile—the average of the fares that passengers actually paid—declined 28½ percent in real terms. This reduction has unquestionably been attributable to the intense price competition and improved productivity that we owe to deregulation. If average yields had merely remained constant in real terms over this period, rather than declining, travelers last year would have paid over $15 billion more for their tickets (in which event, of course, many fewer of them would have traveled).

Those benefits have been very widely distributed. Last year 90 percent of all passengers traveled on discount tickets at an average discount of 61 percent from the posted coach fare.

These are by far the most important facts about the behavior of fares. It is necessary, however, to attach the following qualifications:

1. There has evidently been some increase in the circuity of flights, because of the widespread move of airlines to hub and spoke operations. Some small percentage of the saving in yields per mile is therefore an exaggeration, since the number of miles for specific trips has apparently increased, on average.

2. The very low yields in 1986 were probably not sustainable, since the industry as a whole lost money that year. During the summer just passed, therefore, it is not surprising to discover, average yields have moved back up to levels somewhere between the 10.8 cents in 1986 and the 11.7 cents in 1985. But the latter was still 20.5 percent below 1976 in real terms: at those levels, the passengers traveling in 1986 would have saved $11 billion.

3. Because of the recent wave of mergers and airline failures, the industry has become somewhat more concentrated at the national level than before deregulation. This change means that price competition may well become less severe in the years ahead. About these developments there are, however, several things to be said.

a. First of all, the significant concentration figures are not at the national level but on individual routes: what passengers care about is now much competition is available to them when they fly between two particular points. By its detailed and pervasive restrictions on the routes each carrier could serve, CAB regulation substantially insulated each carrier from the competition of others. By wiping out all these restrictions and freeing carriers to enter whatever markets they choose, deregulation has apparently produced a substantial increase in the average number of airlines per route.

b. The reconcentration of the industry reflects in part, in my view, a deplorable failure of the Department of Transportation to disallow even one single merger and in all but one case even to set conditions to mitigate possibly anti-competitive consequences, even though several of the recent ones have clearly suppressed competition between the merging parties. I do not suggest that this last consideration alone should have been definitive in all cases: in most cases there were also positive arguments in favor of the mergers. I find it impossible to believe, however, that our traditional antitrust agencies would have permitted all of them; the Transportation Department seems to have no appreciation whatever of the dangers that our antitrust laws were set up almost a hundred years ago to forestall.

c. In any event, and most important, the industry is still far more competitive today than it was under regulation. Because of the removal of all the restrictions on their operating authority, all the carriers are either actually or potentially competitors of one another. And that competition is real and active: witness the massive invasion of East coast markets by American Airlines, with its new hubs at Nashville and Raleigh/Durham, and by United Airlines, with its hub at Dulles Airport, both of which have clearly intensified competition between them and such carriers as Delta, Eastern, USAir, and Piedmont.

4. Having recognized how very widespread have been the benefits of this price competition, it is necessary to recognize also that they have nevertheless been unevenly distributed geographically, because the intensity of competition has of course varied from one market to the other. As a general proposition, yields are markedly higher on thinly traveled than on densely traveled routes.

These differentials are not entirely discriminatory: it genuinely costs more per passenger to provide service of any given frequency on thin than on dense routes, largely because providing a seat-mile on small planes costs much more than on large planes. For the same reason, it is more costly to provide the frequency of service convenient for business travel than the kind of service discretionary travelers are willing to pay for. It also costs more, per mile, to provide service on short than on long hops.

The price wars that have occurred on the very dense routes have of course brought unusually large benefits to travelers there. The discrepancies between those fares and ones on more lightly traveled routes does not mean, however, that travelers on the latter routes are being correspondingly overcharged. It is simply not true, as a general matter, even though it is often asserted, that these travelers are somehow bearing the burden of subsidizing the others; or that their fares are higher than they otherwise would be because carriers are cutting fares on the dense long hauls and recouping the consequent losses by raising fares to them. There are at least two reasons why these inferences are illogical. The first is that in most instances the carriers serving the lucky markets are not the ones that serve the unlucky ones. There is no reason why, if, for example, American, Continental and United are cutting each others throats between, say, New York and Los Angeles, commuter carriers should respond by raising their fares between, say, Omaha and Des Moines.

Second, even where it is the same carrier that serves both routes, it is difficult to accept the proposition that it would as a general matter previously have charged less than the market allowed on the shorter or thinner hauls, and only later have been motivated to raise those fares because it began to lose money somewhere else. That would be simply irrational behavior.

On the contrary, if the introduction of intense price competition on the dense routes has any effect on the fares on thin ones, it is more likely to be to reduce rather than to increase them. Once SuperSavers were introduced, they quickly spread all over the country, essentially because travelers deserted their customary points of origin and destination in order to take advantage of the discounts where they were being offered. I can get SuperSavers out of my hometown of Ithaca, New York even today—partly because if there were none available, I could drive to Syracuse, 55 miles away, and get them from a number of competing carriers there. Doubtless it is this very reason that explains the fact that the overwhelming majority of passengers do indeed travel at discount fares.

I cannot assure this Committee that competition is or will remain sufficiently effective everywhere to give travelers all the protection they deserve. What I can assert with total conviction is that even if it were not, it would still be totally irrational for Congress to contemplate going back to regulation as it was practiced between 1938 and 1978, which thoroughly and systematically suppressed all price competition from the outset.

Productivity

The other major accomplishment of deregulation has been very striking improvements in productivity. It has made them possible by removing the detailed regulatory restrictions on where carriers might and might not fly, and so given them the flexibility to plan their own operations as they see fit. And it has compelled improvements in efficiency through the intense pressures of the price competition it released. The carriers have succeeded in getting more revenue hours per day out of their planes; they have put more seats in their planes; their load factors—the percentage of those seats filled—have been consistently above prederegulation levels, largely because of the deeply discounted fares which competition has forced them to offer for seats that would otherwise go empty. The dramatic move to hub-and-spoke operations, which would have been impossible under regulation, has increased efficiency in large number of ways: it has made possible fuller utilization of equipment, the employment of larger and more efficient planes, and the offer of a wider variety of destinations, all because of the confluence of traffic along the spokes to and from the hub. It was for this reason primarily that the study by Clifford Winston and Stephen Morrison, published last year by the Brookings Institution, concluded, above all else, that regulation had generated net welfare benefits on the order of $6 billion per year.

A simple-minded but sufficient reflection of what has happened to productivity in the industry over the last ten years is provided by comparing the 105 percent increase over this period in revenue passenger miles with the 39 percent increase in total employment. This means that revenue passenger miles per employee have gone up more than 75 percent during this deregulation decade. (The opponents of deregulation may observe that productivity increased markedly during the preceding decades as well, and indeed it did. The simple answer is that those improvements were the reflection largely of the revolution involved in the shift from piston to jet aircraft; there has been no such even remotely comparable favorable factor operating since 1978.)

THE QUALITY OF SERVICE AND GOVERNMENTAL DERELICTIONS

The question of what has happened to the quality of service is a good deal more complicated. I believe a fair appraisal of the record justifies the following three conclusions, which I proceed next to support:

In very important respects, quality of service has improved;

A good deal of the deterioration reflects the success of deregulation, not its failure;

A great deal of the residual undeniable deterioration in quality is the simple result of gross derelictions on the part of the Federal government, the remedy for which is not reregulation, but for the government to do its job.

1. To begin with the most important aspect of service quality: so far as the objective evidence of accident rates is concerned, air travel is definitely and markedly safer now than it was before deregulation. Accident rates during the last eight years—whether measured as total accidents, fatal accidents, or fatalities per million flights—have averaged 35 to 40 percent below pre-deregulation levels; and there has been absolutely no adverse trend within these recent years.

2. It is possible, of course, that the margin of safety has narrowed. It may be that the number of near misses has increased, although there are no consistent statistics going back before 1979 to support that hypothesis; and it may also be that the carriers have, under pressure of competition, been cutting corners on safety. I am in no position to deny any of these. The obvious remedy, however, is larger budgets, ampler staffing and greater vigilance on the part of the Federal Aviation Administration. I have no reason to doubt the popular impression that the FAA has been lamentably unaggressive in demanding larger budgets, in hiring more inspectors, in bringing its roster of fully experienced air traffic controllers up to pre-strike levels—in short, in doing the job that we deregulators warned it would be necessary in the new competitive era.

3. Thanks partly—but only partly—to the subsidized Essential Air Services program, not a single community that enjoyed a minimum level of certificated service before deregulation has lost it. True, many towns have lost uncertificated—i.e., unregulated—service: 91 of them, net, between 1978 and '84 according to the U.S. General Accounting Office; but 137 suffered a similar fate during the decade before deregulation. These losses have had absolutely nothing to do with either regulation or deregulation.

4. Small towns have, on average, experienced a substantial increase in the number of weekly departures, not a decrease. (According to the latest figures I have

seen, this generalization may conceal the fact that the smallest towns, which the FAA designates as "non-hubs," have experienced a very slight decline, while the towns in the "small hub" category have experienced a very substantial increase.)

5. The study by Drs. Winston and Morrison, to which I have already alluded, concludes that the principal beneficiaries of deregulation have actually been business travelers, not only because the majority among them must have been among the 90 percent who traveled on discount fares last year (and many of whom have enjoyed frequent flyer benefits), but also because they have benefited from the availability of flights to a greater number of points, at convenient times, made possible by the dramatic increase in hubbing operations.

6. Congestion and delays have undeniably increased, as have travelers' complaints. Increasing congestion and inconvenience are not in themselves, however, a sign of failure. After deregulation, low-cost, aggressively competing airlines offered the public low fares, provided, necessarily, with correspondingly lower-cost service-narrower seating, longer lines, fewer amenities. The enormous response of travelers to the availability of these new options is a vindication of deregulation, not a condemnation of it.

7. At the same time, these annoyances are the result also, in very large measure, of major failures of government policy.

When the demand for any service exceeds the available supply, it means two things: first that the service is being produced in inadequate quantity, and, second, that it is underpriced. The way an efficient market solves the problem is to let competing demanders bid the price up. This accomplishes two purposes. It creates both the incentive and the resources to expand supply; and it restricts demand to the available supply.

As for the supply side, the airline industry relies primarily on the Federal government to provide air traffic control, and on both it and local authorities to finance the expansion of airport capacity—which takes us right back to the FAA and Congress. The proceeds of the eight percent tax on tickets and excises on aviation fuel and tires, which are supposed to be used to expand airport capacity, have instead been permitted to accumulate in the Airport And Airways Trust Fund, to the tune of approximately $5.7 billion.

Clearly a major source of congestion and delays has been the failure of the government to do its part in expanding the capacity of existing airports and building new ones.

Similarly, the FAA apparently does not to this very day have enough fully qualified air traffic controllers. It hardly increases our confidence to have had it assure us for the last six years since the strike that it had plenty of controllers, only to announce a crash program this year to recruit and train 955 more. And it has evidently failed also to make use of the most modern available technology.

As for the demand side, the spectacle of airplanes filled with passengers, queuing up on the runways for an hour or more, waiting for a chance to fly, proves that the price of takeoffs and landings and of access to the air traffic control system at those times and places is simply too low. The simplest way of solving this problem would be for the airports to set landing fees that vary from time to time and place to place, depending upon the relationship of supply to demand. At present, instead, most of them set the fees, without differentiation between peak and offpeak, on the basis of the weight of the planes, and at levels intended to cover the historic costs of construction. They ought to be charging thousands of dollars for landings at peak hours at congested airports, whether the planes are large or small, and regardless of historic costs. This might translate into sharply increased fares at those times and places—by whatever it takes to eliminate the delays for the travelers willing to pay for that superior service. And they should be using the revenues to charge zero or negative landing fees to airlines willing to land offpeak or at less crowded airports. Competition would translate these into reductions in ticket prices at those times and places. Travelers to whom it is very improtant to take off and land at peak times, using convenient airports, would pay higher fares—quite possibly much higher; but in exchange they would be spared the senseless delays to which they are now subjected. And travelers to whom money is more valuable than those conveniences could be offered bargains to travel offpeak and/or use uncrowded feeder airports.

8. Finally, the Federal government has clearly been delinquent in failing to enforce the antitrust laws and to exercise its responsibilities to protect travelers against deception. As for the latter, when an airline tells a passenger that he or she has a confirmed reservation and then proposes to bump him or her because it has overbooked its seats, it has in fact engaged in misrepresentation; that is why, when I was Chairman of the CAB—recognizing also that overbooking made good economic

sense, so long as passengers with confirmed reservations were subjected to no penalty if they failed to show up—we imposed the rule requiring them in those circumstances to offer bribes large enough to get volunteers to give up their seats. The same thing is true when the airlines advertise flight departures and arrival times that they cannot possibly meet, because of overscheduling; and it is surely some sort of violation of an implied contract if it loses a passenger's baggage.

There is absolutely nothing about deregulation of the airlines that would be incompatible with strict governmental enforcement of regulations protecting consumers against this kind of abuse.

Nothing is going to discredit deregulation more quickly and thoroughly than a failure of the government to fulfill its responsibilities to ensure safety, expand airport and air traffic control capacity, and to price scarce takeoffs and landings at congested airports efficiently. And as in the case of all other industries, that clearly includes enforcing the antitrust and consumer protection laws. The greatest danger of reregulation is posed, it seems to me, by the laissez-faire zealots who don't understand the difference between these forms of entirely proper government intervention and the restrictions on entry and price competition that we did so well to abandon.

It would be very ironic if, by our failure to diagnose the source of our preent discontents about the airline industry, we were to return to the policies of protectionism and centralized planning, at the very time when countries as dissimilar as China, the Soviet Union, Chile, Australia, New Zealand, France, Spain and Portugal are all discovering the superiority of the free market.

The CHAIRMAN. The next witness will be Mr. Julius Maldutis, the Vice President of Aviation Research for Salomon Brothers.

We welcome you, sir.

We appreciate your being with us. We are sorry for the delay, but you have seen what has gone on already this morning. We have had some very important testimony.

We would be glad to include your statement in its entirety. We have reviewed it, and if you could highlight it, we would appreciate it.

STATEMENT OF JULIUS MALDUTIS, PH.D., VICE PRESIDENT, AVIATION RESEARCH, SALOMON BROTHERS, INC.

Mr. MALDUTIS. Thank you very much, Senator.

Dr. Kahn is always a very difficult act to follow. I have had an opportunity to debate these issues with him in many forums, and as a statement, let me briefly summarize by saying that I disagree with Dr. Kahn on one central point, namely, while the Aviation Act of 1978 was passed on October 26, I believe that the airline industry really was not deregulated as a practical matter until mid-1983.

I think there are three reasons why that statement is valid. First of all, our friends in the Middle East doubled fuel prices in 1978 and 1979. Airline managements were preoccupied with fuel savings measures. They grounded older and obsolete airplanes and removed weight from aircraft in very imaginative ways. To the contrary, during that period, they raised fares by about 11 percent.

The second factor was the professional air traffic controllers strike which occurred in mid-1981, and as a result of which, the FAA reregulated de facto the industry by controlling flight operations at approximately 22 airports. At some high density airports, operations were cut by an average of 35 percent. And it really was not until mid-1983 that restrictions at about 18 of these airports were removed.

The third reason why the industry was not deregulated until mid-1983 is the U.S. economy experienced the worst recession in

1982 that it had experienced since the early 1930s, and it was not until mid-1983 that the economy recovered.

What have been the results of deregulation? I think obviously it has been a grand success, as many witnesses have testified, and I think Congress should be proud and should take the credit. I think the fact that many foreign governments are now embarking on various programs of liberalization and privatizing their national carriers I think is a reflection of that success. We have heard witnesses on the benefits that consumers have reaped, and I will not repeat them. They are a matter of record.

I would like to, however, point out what the financial results of the industry have been. In my testimony in Figure 1, I show the revenues and profits of the U.S. scheduled airlines in the eight year period before deregulation and the eight year period after deregulation. The profits in the earlier period were about $3.2 billion. The profits in the latter period were, an appalling $400 million profit for an eight year period.

I think it is incorrect to ascribe the failure of the industry to produce profits to deregulation. I think there were recessions, bankruptcies, price wars and obviously mismanagements that caused these results. As Exhibit A,[1] I have included a detailed study of the financial condition of the industry which is summarized in Figure 2.

What the results basically show is that the financial condition of the industry as a whole, namely, the balance sheet, today is worse off than it was in the pre-deregulation period.

Given that, I would like to focus on the merger movement because it will lead to one of my central points of this morning's comments, is why did we have this massive consolidation merger movement literally in the past two years? Why did we not have it in the earlier years of deregulation?

I think there are several important factors. First, many managements realize that 1988 is a presidential election year and we will have a new administration that may follow different merger guidelines or policies.

The second factor is that this administration has had extremely liberal merger guideline policies, so why not get everything that you can.

And the third factor is managements realized that it is much cheaper to buy airplanes on Wall Street rather than at Boeing in Seattle, Washington or McDonnell-Douglas in Long Beach. And also, the carriers saw an opportunity for a very inexpensive way to enter markets and develop control of those markets.

What I have done as Exhibit B is I have analyzed the 50 largest airports in the United States, and I think it would help answer many of the questions that were raised by members of your committee, Mr. Chairman. The results of that study are summarized in Figure 3 as a starting point where we see since 1977 market shares for each carrier through the first quarter of 1987. The conclusions of that are very simple. We had 24 independent carriers who had a market share of more than 1 percent. Today we have 11 independent carriers. Second, the six largest carriers had 63.2 percent of the total air travel market, and today they have almost 80 percent. I think that clearly demonstrates the issue of growing concentration.

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[1] The exhibits were not reproducible.

I would like to focus on the Herfindahl-Hirschman Index. This index is nothing more than the sum of individual carrier market share squared. The Herfindahl-Hirschman Index is shown at the bottom of Figure 3, and I might add that the Justice Department Antitrust Division has used this index in testing whether there is industry concentration or not. If the index is under 1000, the industry is labeled as unconcentrated; between 1000 and 1800 it is called moderately concentrated; and over 1800 it is called highly concentrated.

We can see that the HHI index showed a decline in concentration from 1977 through 1981, and then we have had an increase in concentration, and the index stood at 1300 by the first quarter of 1987. It is because of this index that I believe the administration has followed very liberal merger guideline policies. This index is based on national market shares. I believe that this index is highly flawed, and it can be seen how the index is flawed by constructing a similar index for each airport, and that is shown in Figure 4.

Here we have 50 of the largest airports in the United States showing the HHI index. It shows that there were 40 airports, or 80 percent of the airports in Figure 4, that had an index over 1800, indicating an enormously high degree of concentration. At the bottom of Figure 4 I have also computed a weighted average index for these 50 airports. This index in 1977 stood at 2215, and at 3531 at the first quarter of 1987. Keep in mind that an index of 1800 is labeled as a highly concentrated industry.

Therefore, the airline industry today is more highly concentrated than I think anybody realizes. I believe that a serious re-examination should be made of the entire merger movement that has taken place in the industry. I am very tempted to conclude as a result of this study that none of the mergers that have been approved should have been approved by the administration.

A question that always arises in assessing the impact of deregulation is this question of ease of entry and new carriers. First, I believe that there are no more markets or hubs left. Today there are 40 major hub airports in the United States. Second, I think everyone recognizes that airport facility constraints in terms of gates and landing slots make it prohibitive if not exclusionary for any new airline to enter a market.

But most importantly, I submit that the capital markets are closed. This is an area that I deal with. The last public issue of a new airline being financed on Wall Street was on September 6, 1985 when Presidential Airways was launched in selling 3 million shares. The capital markets will not finance the formation of any new companies. The losses to investors and lenders from investing in the Peoples Express, Air One, Air Atlanta, just to name a few, have been prohibitive. If you are a fiduciary, someone who manages money, a pension fund, would you invest in a new airline, given the record of losses? I think not.

The past Chairman of the Civil Aeronautics Board has argued eloquently on many occasions that there will be this constant recycling of aircraft and airline employees from older airlines into new ones because there is a certain romance on Wall Street with newly formed airlines. I can tell you quite clearly that we may finance many things on Wall Street; romance is not one of those. I believe that we will never see the formation of the Peoples Express type of companies because the capital markets are closed.

In terms of airline pricing, let me offer a few observations. First, under regulation, fares to smaller communities were relatively low because airlines practiced internal cross-subsidization. While economists may debate that issue, I think the evidence is quite clear that fares to small communities today have risen much higher than normally was expected. Many airlines have developed sophisticated capacity management systems where they can alter the number of seats that are offered at different types of fares to maximize revenues.

Third, I believe it is still unclear at this stage whether development of megacarriers or oligopoly will result in abnormally airline fares. I do not think anyone can predict the ultimate course of airline fares over the long term. I think one thing is certain: we have seen a great deal of volatility, and I think we will continue to see volatility in airline fares.

In conclusion, I would offer the following recommendations. I would first strongly urge that carriers should be forced to release performance data to the public, so that the public can make choices. Data on consumer complaints, on-time performance, canceled flights, lost baggage, and maintenance problems are all needed to rebuild consumer confidence in this vital transportation system, and I am pleased to say that the Department of Transportation has taken action.

Second, Congress enacted deregulation legislation, and it has been a success. Yet the national airway system has not kept pace. I think an accelerated program to expand the system in terms of air traffic controllers as well as modernization of the system should be a top priority.

Third, I believe U.S. carriers must have equal opportunities in world markets. This country has a massive trade deficit. For far too long, valuable U.S. landing rights have been dispensed to foreign airlines with nothing in return.

At this stage, I think the industry should not be reregulated. The patient does not need an operation, but I believe the patient should be watched and needs time to recuperate. Reregulation at this time I think would be an admission that the objectives of the 1978 Act have not been fulfilled when in fact they have.

Mr. Chairman, I think these hearings are a must. I think a national debate should take place. The airline industry is at a crossroads. It has undergone a vast restructuring, and it no longer resembles the industry we all knew. I think it would be the ultimate, supreme irony that having led the way in aviation technology and in breaking the shackles of economic regulation, that the United States also leads the way to restoring regulation to an industry that has become a vital part in our economy and in world aviation.

I thank you very much.

The CHAIRMAN. Well, the committee thanks you very much. There is no question but that that is a very sobering statement, and a very fine study from the real life side of the field rather than the economist's view. You have got money to invest or not to invest, and you tell us that no one is going to invest, and that the concentrations continue. And while you say deregulation is a success, it is much like the guy who has jumped off the top of the 50th floor and he shouts to his friend on the 30th floor, so far, so good.

Where are we headed? And we are headed down. And rather than—well, I guess you are right. I do not think we are going to be able to move this Congress or this administration, so it will be a debate. I am a realist. But there ought to be some things in here to try to stop the concentration of the industry, to try to even out the service. Let me ask you, Mr. Maldutis, are the airlines now really all in a sort of practice of predatory operation in that they are all suffering losses, but just awaiting the rest of the crowd to go broke before they do. Then perhaps, they will come back in and start making a profit, and then establish a monoply?

I am beginning to see that kind of a picture because the airlines continue to lose money, yet like you say, the level concentration is over the 1800s, up to 3200, 3300. If you lose that $235 million last year, and they have a debt service of about $15 billion, there is no way for them to come out but to continue to lose.

That verifies your statement that there will be a lack of new entrants. I mean, the theorists can come and say anybody can enter at any time. Well, how? If you cannot get a slot, you cannot get in, you cannot land a plane.

Dr. MALDUTIS. And I will not give them money.

The CHAIRMAN. And you will not give them money.

So there is not going to be that competition, even though we can theoretically say the market is open; the concentrations have closed the market. The hub operation is a very dangerous kind. And financially, it is just like a taxi stand, everybody just cutting each other's throat out there.

We see pilots coming to this committee, responsible ones who have been with a particular airline for 17 years and do not have any gripe. But they are saying the airlines are sacrificing safety for profit. They are all being forced to do it. The President of the Air-Line Pilots Association is saying they are doing it.

We can see the gathering storm. I just do not want to sit idly by understanding the increase of near misses, the pilot deviations, all these other things heaping up on top of us, and then all of a sudden it begin to crack up around like Black Monday, October 19, did economically. I do not want that to happen in the airline industry and then not have done something that we could have done.

I do not have my bit in the teeth that we have got to reregulate everything, but there ought to be some steps, as you indicate. Are we really publicizing, the Department of Transportation now you say is coming forward and saying, all right, you have got to start recording the lost baggage, canceled flights, on-time performance, maintenance problems. Is that being done now?

Dr. MALDUTIS. My understanding is yes, Senator, and the Department of Transportation will release much more of the data than they have been releasing in the past. And if we look at the reasons why some of the carriers have failed, they failed because they provided poor service. I think Peoples Express, the experience of that carrier is a very good case in point, where low fares was not the answer. The public wants good, convenient service, and the company was not willing to provide that, and the company failed, so that the public is astute enough and will make choices.

The second observation I would make, I would rather have the FAA err on the side of conservatism. If there are practices that the carriers have used that have led to unsafe conditions, I think the American public would prefer to have very strict controls by the FAA.

The third observation I would make is we have had an unprecedented economic expansion over the last four to five years. Sooner or later we are going to get a recession, and I believe that there are several companies whose financial condition is still suspect, and I think we may very well see financial failures take place in a recession, so that the issue has concentration stopped or do we have stability in the industry is not yet resolved, and in fact, we could see even further concentration, either through failures or carriers coming to the Department of Transportation and pleading for a merger because of financial difficulties.

The CHAIRMAN. We have a lot of questions because your analysis is profound, and we are going to have to study it in depth.

We are going to leave the record open. I want to get to these other two witnesses who have been very patient this morning.

Thank you very, very much.

Dr. MALDUTIS. Thank you, sir.

[The statement follows:]

STATEMENT OF JULIUS MALDUTIS, Ph.D., VICE PRESIDENT, SALOMON BROTHERS, INC. *

Mr. Chairman, members of the Committee, I welcome the opportunity to appear to express my views on the state of the U.S. airline industry. As a financial analyst specializing in the airline industry at Salomon Brothers Inc since 1972 and as an executive of Trans World Airlines, Inc. for seven years prior, I have had an opportunity not only to be actively involved with the management of one of the leading U.S. airlines, but I have also participated in the hearings that lead to the enactment of deregulation in 1978. In my current capacity, I advise institutional investors and lenders on the prospects for the industry and, more importantly, on the individual carriers.

Today, the U.S. airline industry is perceived as a troubled industry by the American people. Consumers believe that the industry is characterized by massive delays, lost baggage, surly employees, poorly maintained equipment, unsafe and crowded skies, misleading advertising, unavailability of low fares, and the list goes on and on. Lenders and investors expect further bankruptcies and mergers at the same time that they have grown disenchanted with the post-deregulation new airlines. The rapid consolidation of the industry has created the impression of enormous market power among the remaining megacarriers, giving rise to the fear of ever-increasing fares.

This growing frustration is leading some to demand full reregulation of the industry by reconstituting the old Civil Aeronautics Board (CAB), warts and all. Others have taken the position that there is no need to tamper at all, and that market forces will solve all of these problems.

In order to help the work of this Committee, I would like to offer the following observations concerning the status of the airline industry.

First, several days ago, the ninth anniversary of the enactment of the Airline Reform Act of 1978 passed without much fanfare. While U.S. airline deregulation is now entering its tenth year from a legal perspective, as a practical matter, it really did not commence until 1983.

To start with, our friends in the Middle East doubled fuel prices in 1978 and 1979, and airline managements were preoccupied with fuel savings measures. They grounded older and obsolete airplanes, removed weight from aircraft in imaginative ways and would not even dream of implementing a discount fare. To the contrary, they raised fares by about 11%.

Next, the Professional Air Traffic Controllers (PATCO) undertook the now familiar and much discussed job action in 1981. As a result, the Federal Aviation Administration (FAA) was forced to impose severe capacity restrictions at 22 airports. At some airports, capacity reductions averaged 35%, and it was not until mid-1983 that the air traffic controller corps was rebuilt to permit elimination of controls at 18 of the 22 airports.

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*The exhibits referred to were not reproducible and are in the Committee files.

Furthermore, the airline industry, as well as the economy, experienced the worst recession since the early 1930s. During this period, airline travel plummeted for the first time in modern aviation history. Therefore, the airline industry did not return to norm until the middle of 1983.

What are the results of the industry's deregulation?

Using air travel statistics, deregulation has been an unprecedented success. In 1978, 220 million Americans flew on scheduled airlines. This year, the number of air travelers is estimated to reach 440 million -- a doubling of the number of passenger trips taken in less than a decade. A recent Gallup Survey showed that 72% of the U.S. adult population has flown. Air transportation in the United States has become truly a mass transportation system. Aboard, it has united vast continents and has become an engine for economic growth for many nations. Liberalization, if not outright deregulation, has spread to Canada, Australia and now to Europe, as Governments seek to make available the benefits of deregulation to their citizens. To make sure that deregulation or liberalization,succeeds, Governments are privatizing their nationally owned airlines. The success of British Airways is but one recent example.

In terms of airline fares, the consumer has reaped vast benefits as well. The average airline fare on U.S. scheduled airlines increased at an average of 2.9% per year since 1978. In contrast, the Consumer Price Index showed an annual average increase of 5.9%. In effect, real airline fares today are 11.4% below the fares that were in effect when deregulation legislation was enacted.

The consumer has benefited in other ways, as well. A look at 1986 provides the following facts. Airline fuel prices fell by 31.8%, or by about $3 billion, with all of the benefits from lower fuel costs accruing to the airline traveler, who enjoyed unprecedented bargains. Average airline fares fell by 9.3% in 1986. In fact, today, about 92.7% of all domestic travelers fly on a discount fare, with an average discount of 62.4% off of full fare. Stated another way, only seven out of 100 passengers pay full fare. Ten years ago, only about 45% of air travelers had access to discount fares. This is not to say, however, that all regions of the United States have enjoyed equal access to discount fares.

The financial results of the industry show a different story. Figure 1 shows the profit record of the U.S. scheduled carriers.

Figure 1. U.S. Scheduled Airlines Profit Results Eight Years Before and After Deregulation (Dollars in Billions)

	1971-78	1979-86	Percentage Change
Operating Revenues	$124.0	$313.8	153.1%
Operating Expenses	118.6	310.0	161.4
Operating Profit	$5.4	$3.8	(30.0)%
Net Profit	$3.2	$0.4	(87.0)%
Profit Margin	2.6%	0.1%	NM

NM Not meaningful. Source: Air Transport Association.

The record is quite clear. Since 1978, the earnings results have been disappointing, to say the least. Huge earnings have not materialized, as many had expected. In fact, just the opposite is true. But it is incorrect to infer or to conclude that deregulation per se was responsible. Recessions, bankruptcies, price wars, and mismanagement played equally important roles in determining the profit results.

If the earnings results during the past eight years are marginal at best, the industry's financial condition must also be examined. Earlier this year, I published a study entitled, "The Financial Condition of the U.S. Airline Industry at Year-End 1986," Salomon Brothers Inc, June 4, 1987, which is attached as Exhibit A. A summary of the results of that study are contained in Figure 2.

Figure 2. Financial Condition of the U.S. Airline Industry, 1977–86 (Dollars in Millions)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Cash and Marketable Securities	$1,820.5	$2 111.9	$1,809.8	$1,366.9	$1,148.4	$1,614.2	$2,851.2	$3,709.9	$4,547.7	$3,612.7
Working Capital	566.7	480.5	(223.1)	(807.2)	(1,012.2)	(1,575.2)	(609.4)	(522.3)	510.6	(1,383.2)
Current Ratio	1.14x	1.10x	0.96x	0.88x	0.77x	0.80x	0.92x	0.95x	1.04x	0.90x
Pretax Interest Coverage	2.3x	3.3x	1.7x	1.0x	0.3x	0.1x	0.6x	2.0x	1.5x	0.8x
Fixed-Charge Coverage	2.0	2.8	1.5	1.0	0.4	0.2	0.7	1.8	1.4	0.9
Cash Flow as a Pct. of Long-Term Debt	30.3%	39.5%	25.2%	19.3%	14.3%	10.2%	22.3%	32.9%	29.3%	19.3%
Cash Flow as a Pct. of Total Debt	27.7	36.1	23.0	17.1	12.4	9.2	19.9	29.0	25.1	16.6
Retained Cash Flow as a Pct. of Long-Term Debt	29.2	37.7	23.6	18.2	13.3	9.2	21.0	31.5	27.8	18.3
Cash Flow as a Pct. of Capital Expenditures	118.9	99.5	56.1	45.4	34.6	29.7	55.4	99.7	69.6	46.9
Long-Term Debt as a Pct. of Total Capitalization	53.7%	47.0%	50.2%	53.6%	54.7%	60.3%	57.3%	52.2%	52.4%	56.5%
Long-Term Debt as a Pct. of Total Equity	146.1	108.0	120.1	134.4	139.6	178.6	157.8	130.2	129.0	153.0
Total Debt as a Pct. of Total Capitalization and Short-Term Debt	55.9	49.2	52.5	56.7	58.3	62.7	59.9	55.3	56.2	60.2
Retained Earnings	$2,211.5	$3,199.6	$3,542.5	$3,626.5	$3,472.0	$2,709.8	$2,442.5	$3,046.1	$3,851.7	$3,251.3
Return on Avg. Common Equity	13.2%	20.1%	6.7%	(0.3)%	(11.9)%	(16.0)%	4.0%	9.3%	3.5%	(6.0)%
Pretax Return on Avg. Capital	11.3	13.6	7.3	5.0	1.8	0.4	4.3	13.4	9.7	5.4
Cash Flow From Operations	$2,033.5	$2,524.4	$1,940.8	$1,736.0	$1,291.6	$1,112.5	$2,590.0	$3,659.3	$3,926.2	$3,041.7
Capital Expenditures	1,710.0	2,530.5	3,459.0	3,826.7	3,731.0	3,752.1	4,678.3	3,589.8	5,640.0	6,488.6
Long-Term Debt and Capital Leases	$6,714.0	$6,395.0	$7,700.7	$8,985.5	$9,041.8	$10,957.4	$11,634.3	$11,132.0	$13,417.3	$15,766.5
Short-Term Debt	623.7	593.0	736.0	1,184.7	1,400.0	1,140.1	1,365.7	1,500.7	2,211.1	2,580.7

Source: Company reports.

The study shows that in the 1977-82 period, the financial condition of the U.S. airline industry deteriorated dramatically. Since then, through the end of 1985, a gradual but significant recovery had taken place, almost approaching the pre-deregulation level. In 1986, however, as a result of sharp losses at a few carriers, the financial condition suffered a steep setback and remains significantly below the condition immediately prior to 1978.

This year's third-quarter earnings results appear to be falling short of year-ago levels, thus leading to the conclusion that 1987 will be no better than the marginal profits of 1986. Consequently, a permanent improvement in the industry's financial condition does not appears to be imminent.

To understand the above results, I would like to review the competitive forces at work and the structural changes taking place in the industry.

First, the industry has been in the throes of a massive consolidation. Prior to 1978, there were 36 carriers under the Section 401 Certificate. In the 1978-86 period, 198 new carriers were certificated, bringing the total to 234 carriers. However, in the past several years, the industry has experienced a loss of about 160 companies. Thus, there are 74 airlines, and the number, rather than increasing, is shrinking. We will have to see what the toll is when the next recession strikes, because there are four carriers with weak balance sheets. Many of us in the industry and the pro-deregulationists expected the large, established, inefficient carriers to be the ones that would either shrink or disappear. However, it appears that, on the whole, they have survived and that the upstarts -- the post-deregulation airlines -- have disappeared. Only two carriers remain in this category.

The most significant part of this consolidation process has been the massive merger movement in the past two years. Why has it been so visible -- so compacted into the last two years -- rather than in the immediate post-deregulation period or during the peak of the recession? The answer is revealed in several factors.

First, many managements realize that 1988 is a Presidential election year and that a new administration may follow different merger policies or guidelines.

Second, under the current administration, and I believe that all will agree, merger guidelines have been quite liberal.

Third, it became apparent that it was cheaper to buy airplanes on Wall Street than in Seattle, Washington or Long Beach, California.

Fourth, buying another airline, became an easy and inexpensive way to buy into markets or market share, given the congestion and lack of facilities at the major airports.

To assess the impact of this consolidation process, a detailed study of carrier market shares was performed and is attached in Exhibit B. The study, "Airline Competition at the 50 Largest U.S. Airports Since Deregulation," Salomon Brothers Inc, August 1987, analyzed airline market shares of the total national air travel market and carrier market shares at the 50 largest airports. Figure 3 shows airline market shares since 1977.

Figure 3. U.S. Airline Industry — Market Share by Airline Based on Enplanements at All Airports, 1977–87[a]

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987[b]
United	14.46%	14.98%	11.38%	11.27%	10.63%	11.84%	12.57%	12.82%	10.67%	12.95%	13.21%
American	10.21	10.29	9.98	9.00	9.18	9.99	10.43	10.67	11.56	11.82	11.56
Eastern	13.28	13.91	13.75	13.75	13.22	12.69	12.28	11.91	11.70	10.94	11.69
Delta	12.85	13.33	12.96	13.44	12.89	12.16	12.22	11.68	11.15	10.53	10.53
Piedmont	1.75	1.68	1.76	1.99	2.69	3.07	3.89	4.46	5.06	5.85	5.77
USAir	4.98	4.72	4.52	4.95	4.97	5.29	5.39	5.33	5.88	5.57	5.44
Northwest	4.35	2.42	3.74	4.01	4.13	4.10	4.22	4.13	4.07	5.24	9.29
Continental	3.47	3.46	3.18	2.93	3.11	3.53	3.40	3.48	4.52	5.23	9.56
Trans World	7.47	7.25	7.26	7.10	6.67	6.39	6.19	5.78	5.84	5.14	5.62
Republic	—	—	1.92	4.14	6.21	6.51	5.89	4.75	4.88	3.77	—
People Express	—	—	—	—	0.30	1.02	2.23	3.67	4.14	3.36	—
Southwest	—	—	1.70	2.38	2.85	3.28	3.58	3.77	3.70	3.33	2.88
Pan Am	3.22	3.19	2.98	5.30	5.02	4.43	4.69	4.35	3.65	3.20	3.22
Western	3.95	4.09	3.85	3.44	3.41	3.61	3.73	3.33	3.33	3.14	2.93
Pacific Southwest	—	—	2.78	2.09	2.25	2.56	2.69	2.45	2.53	2.75	2.66
America West	—	—	—	—	—	—	0.10	0.75	1.44	1.83	2.39
AirCal	—	—	0.92	1.03	1.29	1.23	1.18	1.25	1.25	1.29	1.31
Frontier	1.98	2.03	2.10	2.10	2.33	2.11	2.10	2.20	1.92	1.18	—
Ozark	1.70	1.69	1.30	1.34	1.54	1.55	1.61	1.55	1.55	1.06	—
Hawaiian	1.36	1.37	1.22	1.15	1.08	1.14	0.88	0.94	0.94	1.06	1.15
Aloha	1.04	1.02	0.96	0.94	0.97	0.88	0.72	0.74	0.70	0.73	0.79
Braniff	4.13	4.25	4.62	4.23	3.87	1.41	—	—	—	—	—
National	2.62	2.57	2.12	—	—	—	—	—	—	—	—
Hughes Airwest	2.16	2.30	1.62	1.91	—	—	—	—	—	—	—
North Central	2.29	2.48	1.25	—	—	—	—	—	—	—	—
Southern	1.45	1.51	0.71	—	—	—	—	—	—	—	—
Texas International	1.36	1.47	1.43	1.51	1.39	1.19	—	—	—	—	—
Total Industry Enplanements (Mils.)	237.9	271.9	310.8	287.1	269.9	276.8	301.1	319.9	357.1	389.7	99.5
Herfindahl-Hirschman Index	**842**	**874**	**767**	**782**	**758**	**764**	**784**	**764**	731	**758**	1,303[b]

[a] Period ending 31 Mar 87. Carriers that have not achieved a 1% market share are excluded from the industry concentration calculations. [b] 1987 Herfindahl–Hirschman Index adjusted for mergers and code-sharing agreements.

Source: U.S. Department of Transportation Form 41 Data.

We can draw several conclusions fron the data.

First, in 1977, the year immediately prior to the enactment of deregulation, there were 24 independent airlines. Today, this number has declined to 11 independent carriers who have market share of 1% or more.

Second, the six largest carriers had 63.2% of the total air travel market. Today, the six largest airlines control 79.7% of the air travel market, and this share appears to be growing.

Third, the Herfindahl-Hirschman Index (HHI) of concentration (sum of the squares of individual carrier market shares) declined in the immediate post-deregulation period as new entrants became a factor in the industry. Since 1981, however, the HHI has increased substantially as a result of mergers, bankruptcies and consolidations.

The Department of Justice classifies market shares into three regions: unconcentrated (HHI below 1,000); moderately concentrated (HHI from 1,000-1,800); and highly concentrated (HHI above 1,800). Obviously, with the HHI at 1,303, the industry is classified as moderately concentrated. This formed the basis for the administrations' liberal merger policies. I believe that industry concentration, based on national market share data, is flawed.

Much confusion and much debate has taken place about the nature of airline competition. In our judgment, airlines compete more at the airport level than the national level. A detailed analysis of carrier market shares at each of the 50 largest U.S. airports is shown in Exhibit B. A summary of the results is shown in Figure 4.

Figure 4. U.S. Airline Industry — Herfindahl-Hirschman Index by Airport, 1977-87[a]

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987[b]
Dallas Love Field	NA	NA	10,000	9,720	9,960	7,976	7,109	6,906	7,731	8,395	10,000
Charlotte	5,695	5,698	5,330	4,598	3,836	4,717	5,425	5,685	5,632	6,713	7,754
Memphis	2,360	2,596	2,231	2,588	2,640	2,672	3,132	3,269	4,215	3,562	7,573
Pittsburgh	2,670	2,764	2,931	3,325	3,845	4,422	5,113	5,358	5,663	6,837	7,227
St. Louis	2,277	2,277	2,455	2,519	2,841	3,599	4,146	3,915	3,917	4,402	6,821
Minneapolis/St. Paul	2,681	1,935	2,148	2,527	2,577	2,923	3,172	3,225	3,118	3,555	6,698
Houston Intercontinental	1,481	1,427	1,301	1,327	1,162	1,298	2,261	2,430	3,641	4,077	6,038
Dayton	2,287	2,338	2,357	2,336	2,134	1,744	3,127	3,831	4,189	4,417	5,822
Salt Lake City	2,537	2,447	2,406	2,066	1,942	3,362	4,966	5,014	5,390	5,671	5,700
Chicago Midway	NA	NA	NA	5,303	7,339	8,100	7,540	5,991	5,109	5,236	4,772
Cincinnati	2,549	2,517	2,439	2,427	2,243	2,019	3,367	3,037	2,196	2,524	4,752
Dallas/Fort Worth	2,355	2,357	2,546	2,546	2,713	3,679	4,561	4,023	4,143	4,500	4,606
Atlanta	3,967	4,032	4,133	4,320	4,236	4,200	4,268	4,188	4,190	4,468	4,544
Detroit	1,513	1,510	1,314	1,453	1,474	1,445	1,329	1,254	2,189	2,151	4.388
Houston W. P. Hobby	NA	NA	8,457	7,165	6,234	4,780	4,110	3,127	3,328	2,953	4,386
Syracuse	3,302	3,287	2,924	2,696	2,343	2,525	2,041	2,030	1,956	1,677	4,193
Denver	1,955	1,891	1,776	1,822	1,938	2,044	2,431	2,424	2,356	3,015	3,943
Baltimore/Washington	1,790	1,829	1,555	1,412	1,306	989	950	1,418	1,847	2,695	3,909
Nashville	1,679	1,696	1,405	1,348	1,300	1,457	1,429	1,272	1,193	2,327	3,891
San Juan	3,741	3,801	3,382	3,014	2,520	2,248	2,362	2,379	2,824	3,792	3,849
Chicago O'Hare	1,575	1,719	1,582	1,715	1,800	1,982	2,365	2,577	2,449	2,836	3,593
Newark	1,612	1,607	1,622	1,556	1,174	1,216	1,759	2,716	2,821	2,395	3,514
Buffalo	3,683	3,689	3,661	3,823	3,814	4,215	3,576	2,864	2,723	2,526	3,308
Washington Dulles	1,606	1,705	1,424	1,474	1,573	1,650	1,607	1,226	987	1,383	3,250
Miami	2,380	2,543	2,463	2,285	2,267	2,464	2,697	2,806	3,075	2,796	3,188
El Paso	NA	NA	3,832	3,468	3,274	2,872	3,894	4,080	3,443	3,089	2,735
Raleigh/Durham	5,558	5,617	4,101	3,257	2,875	2,343	1,995	1,846	2,156	2,121	2,625
Philadelphia	1,412	1,468	1,379	1,366	1,223	1,230	1,181	1,121	1,330	1,918	2,583
Ft. Lauderdale/Hollywood	2,904	2,893	2,896	2,795	2,736	2,553	2,569	2,483	2,536	2,191	2,553
John Wayne	NA	NA	5,017	4,847	4,220	3,715	2,591	2,073	1,741	1,831	2.509
Kansas City	2,253	2,100	2,253	2,042	1,803	1,421	1,035	1,029	1,342	1,735	2,458
Anchorage	1,887	2,121	2,063	2,165	2,145	2,136	1,990	1,613	1,867	2,385	2,306
Phoenix	1,843	1,837	1,607	1,437	1,172	1,061	1,243	1,098	1,601	2,000	2,217
San Francisco	2,274	2,364	1,515	1,474	1,424	1,540	1,552	1,691	1,437	1,723	2,143
New York J. F. Kennedy	1,328	1,360	1,429	1,508	1,584	1,551	1,640	1,660	1,902	1,949	1,982
New Orleans	2,423	2,417	1,930	1,732	1,564	1,433	1,527	1,226	1,254	1,156	1,922
Washington National	1,325	1,363	1,368	1,293	1,079	1,065	1,021	1,040	1,049	1,143	1,920
Boston	1,607	1,651	1,536	1,496	1,317	1,279	1,126	1,044	983	1,065	1,890
Tampa/St.Petersburg	2,174	2,355	2,161	1,813	1,638	1,573	1,541	1,361	1,326	1,296	1,870
New York LaGuardia	1,922	1,874	1,948	1,935	1,600	1,458	1,432	1,423	1,368	1,384	1,801
Orlando	3,472	3,538	2,870	2,177	2,021	1,867	1,781	1,344	1,262	1,219	1,707
Portland	2,655	2,632	2,363	2,193	1,742	1,803	1,437	1,320	1,139	1,270	1,683
Seattle/Tacoma	1,723	1,706	1,550	1,577	1,397	1,295	1,219	1,292	1,212	1,324	1,675
Cleveland	4,201	4,369	2,779	2,192	1,826	1,808	1,813	1,798	1,214	1,150	1,666
Honolulu	1,676	1,712	1,672	1,811	1,566	1,542	1,281	1,331	1,256	1,504	1,637
Indianapolis	1,984	1,874	1,795	1,826	1,620	1,619	1,341	1,241	1,301	1,336	1,568
Albuquerque	2,703	2,693	2,244	1,704	1,555	1,450	1,502	1,491	1,439	1,473	1,518
Los Angeles	1,508	1,479	1,214	1,189	1,133	1,133	1,051	1,003	852	911	1,283
San Diego	2,364	2,243	2,004	1,788	1,696	1,585	1,499	1,252	1,125	1,058	1,280
Las Vegas	1,887	1,770	1,187	1,039	1,078	1,090	1,079	929	758	893	1,208
Weighted Average	**2,215**	**2,239**	**2,224**	**2,243**	**2,198**	**2,248**	**2,462**	**2,455**	**2,562**	**2,764**	**3,531**

[a] Period ending 31 Mar 87. [b] 1987 Herfindahl-Hirschman Index adjusted for mergers and code-sharing agreements.
NA Not available. Source: U.S. Department of Transportation Form 41 Data.

These 50 airports represented 81.1% of the total scheduled passenger enplanements in the United States. Thus, developments at these airports are more than representative of the industry as a whole. Airline competition in terms of scheduling and pricing occurs not only at the national market level, but also at the airport level. Today, a passenger has many alternative hubs that he/she may use to make connections. For example, a passenger traveling between Boston and Phoenix has no nonstop service available. However, he/she has a choice of nine hubs at which he may make a connection to complete his/her journey to Phoenix. Thus, nine airlines compete for this passenger over nine different hubs. As a result, airline fares are held in check when the airlines compete for connecting traffic. However, the passenger who originates or terminates his/her flight at a hub airport may pay excessively high fares. Therefore, measures of concentration at hub airports may have greater relevance for this type of traveler.

Using the market shares, we have calculated HHI concentration at each of the 50 largest airports in the United States. In Figure 4, we illustrate the HHI ranked from the highest to the lowest. With an 1,800 HHI being the threshold for defining high concentration, only ten airports were below this level. Stated another way, 80% of the 50 airports can be considered highly concentrated, exceeding the 1,800 HHI. Furthermore, the ten airports below the 1,800 HHI all experienced declines in concentration from 1977 through the end of the first quarter ending March 31, 1987.

Dallas/Love Field was the most concentrated airport in the United States at the end of the first quarter of 1987, with an HHI of 10,000, because Southwest Airlines, combined with its wholly owned subsidiary TranStar, had a 100% market share.

A careful inspection of the 40 highly concentrated airports shows that in only 11 of these airports, concentration declined. More important, however, is that the four major connecting hubs -- Atlanta, Chicago, Dallas/Ft. Worth, and Denver, all of which have two strong airlines -- also had large increases in concentration. The two largest carriers have simply squeezed out or have made it virtually impossible for other airlines to expand and gain market share.

For the 50 airports, a weighted-average HHI has been computed. It shows that prior to deregulation, the industry was already highly concentrated. The entry of many new airlines in the 1978-80 period kept the HHI at about the 2,200 level. Since 1981, the Index has been steadily rising and, as of March 31, 1987, totaled 3,531. Therefore, the airline industry today is highly concentrated.

Given this high degree of concentration, I believe that a serious reexamination of merger policies is in order.

Many of us on Wall Street are beginning to question the wisdom of this merger movement, because it may be years before profits from the mergers pay off the costs associated with the acquisition. Several carriers have encountered not only serious service problems directly attributable to a merger, but protracted labor problems and financial difficulties, as well.

The recent explosion of service problems can, in large part, be blamed on the multitude of airline mergers. Thus, the growing political backlash from deteriorating airline service and the inequality of airline fares make this and perhaps the next Administration less prone to approve any more airline combinations. Similarly, I believe that there will be no more "new" airlines for years to come. The reasons are simple.

First, there are no more niches or hubs left. In fact, there are about 40 hub airports in the United States. Carriers now boast that some have three, four, five, and as many as six hubs.

Second, airport facility constraints in terms of gates or landing slots make it prohibitive -- if not exclusionary -- for any new airlines to be formed.

Third, the capital markets are closed, and I mean closed. The last public equity issue for a new airline occurred on September 6, 1985 for three million shares of Presidential Airways, Inc. The capital markets will not finance the formation of any new companies. The losses to equity investors who financed People Express, Air One, Air Atlanta, just to name a few, have been prohibitive. If you were a fiduciary -- someone who manages money -- would you invest in a new airline after you experienced a loss of $5-10 million in your portfolio? I think not.

A past chairman of the Civil Aeronautics Board (CAB) has argued eloquently that there will be a process of constant recycling of aircraft and airline employees from old, inefficient, established airlines into the new post-deregulation carriers; the romance on Wall Street that is associated with new airlines is the basic reason for this process. I can assure you that we do not finance romance on Wall Street, contrary to the popular opinion of some people. We may see 15 wealthy orthodontists buy a used airplane and start an airline in some small town, but that will be a short-lived experiment and an exception to the rule.

The final issue is airline pricing. Without a doubt, the passenger has benefited from deregulation, as noted earlier. A sense of unease or frustration appears to permeate consumers' perception of airline pricing. Three themes recur. First, airline fares keep changing too rapidly; second, airlines are misleading the consumer by advertising low fares, but they are never available; and third, low fares are only available to consumers in major urban centers, while smaller city residents are forced to pay higher fares.

Airline pricing was a topic of much debate in the 1970s, and it will continue to be a source of public concern and economic discussion. I would offer the following observation.

First, under regulation, fares to smaller communities were relatively low, because airlines practiced internal cross subsidization. As a result of consolidations, evidence is mounting that fares to smaller communities have risen sharply.

Second, some airlines have developed sophisticated capacity management systems so that they can alter the number of seats that are offered at different types of fares so as to maximize revenues.

Third, it is still unclear that the development of megacarriers or anoligopoly in the airline industry will result in abnormally high airline fares. With airlines increasingly dependent on discretionary travelers, who are price sensitive, it is not clear that airlines will be able to extract high fares.

Overall, no one can predict the ultimate course of airline fares over the long term. The strength of the economy, consumer incomes and confidence, fuel prices, the outcome of several major labor negotiations, and the future of several financially weak carriers will have a major bearing on the direction of airline fares. On several occasions, those in the financial community, brave enough to predict the cessation of airline price competition, have been ruely disappointed. One thing is certain, and that is that we will continue to experience great volatility in airline fares.

In conclusion, I would submit the following recommendations.

First, airlines should be required to make performance data public so that the public can make choices. Data on consumer complaints, on-time performance, canceled flights, lost baggage, and maintenance problems are all needed to rebuild consumer confidence in this vital transportation system. The U.S. Department of Transportation's actions in this area should be commended.

Second, Congress enacted legislation that deregulated the industry. It has been a success. Yet, the national airways system has not kept pace. An accelerated program to fund the expansion of systems in terms of air traffic controllers and modernization of equipment should be a top priority,

Third, U.S. carriers must have equal opportunities in world markets. For too long, valuable U.S. landing rights have been dispensed to foreign airlines with nothing in return.

Fourth, do not reregulate. The patient does not need an operation, but time to recuperate. Reregulation, at this time, would be an admission that the objectives of the 1978 Act have not been fulfilled, when, in fact, they have been. Further hearings and debates are necessary to assess the results and consequences of airline deregulation.

Today, the airline industry is at a major crossroad. It has undergone a vast restructuring and no longer resembles the industry of the 1970s.

Wouldn't it be the ultimate supreme irony that having led the way in aviation technology, as well as in breaking the shackles of economic regulation of the airline industry, the United States also leads the way to restoring regulation of an industry that has become a vital force in world economic systems?

The CHAIRMAN. Mr. Nader, we welcome you.

STATEMENT OF RALPH NADER, CONSUMER ADVOCATE

Mr. NADER. Thank you, Mr. Chairman.

The CHAIRMAN. We appreciate your indulgence in sticking with us here this morning.

Mr. NADER. Thank you for the invitation to testify on the situation in the aviation industry at this stage in its deregulatory history vis-a-vis consumers.

The Airline Deregulation Act of 1978 did not deregulate safety, antitrust standards, nor consumer protection. Only the current administration in power did that, and in that series of abdications rest the problems that are now becoming ever more prominent as the fruit produced by deregulation under these permissive environments becomes overripe and proceeds toward deterioration.

To the Dole-Burnley regime at the Department of Transportation, most of the problems which have received media and congressional attention are the short term consequences of "airline consolidations," the problem, for example, of Northwest swallowing Republic Air and having a severe case of indigestion. To others more removed from an industry-indentured mind set, these problems reflect a deterioration in the quality of competition within the airline industry and the paucity of antitrust, safety and consumer protection regulation. In turn, these neglects can be placed at the feet of Congress and its consistently incomplete strategy that leaves airline passengers without effective rights, remedies and facilities to organize themselves into a powerful force for progressive change by the industry and the government.

Day after day before congressional committees, year after year, witnesses have documented first the evolution and then the devolution of the deregulatory experience. The aviation industry has moved from a regulated oligopoly in the 1970s to an unregulated oligopoly in the 1980s. As pointed out by Northwestern University's Frank spencer and Frank Cassell,

> By November 1986, the emerging top five mega-airlines flew 72.8 percent of industry's revenue passenger miles compared with 54.7 percent in January 1986 before the wave of takeovers engulfed the industry. For the year 1970, before deregulation became an issue, the top five airlines flew 68.5 percent of the revenue passenger miles.

In other words, more concentration now in the hands of the few large carriers than there was during the regulatory period of the 1970s, and more coming.

This year the Department of Transportation, now headed by Jim Burnley as acting secretary up for confirmation, approved the USAir-Piedmont merger while overruling the administrative law judge's lengthy opinion in late September, and a very good one, I might add, disapproving the merger as anticompetitive. Furthermore, Carl Icahn, the dominant power in TWA, has stated his desire to find a merger partner; Pan American is available if anyone in the airlines wants to acquire it. All this concentration was not envisioned by the proponents of deregulation who believed that there were antitrust laws to prevent such market power over routes and cities.

Other anticompetitive factors which have matured in the 1980s also were not foreseen. Control of airport access, gates, slots, ticket counters and other facilities in the age of scarce airport resources, became crucial barriers to entry. When I say scarce airport resources, Mr. Chairman, I am talking about at the airports, not in the $5 billion that the government has yet to spend to expand airport facilities. Computerized reservation systems, frequent flyer programs, tight marketing agreements between large and regional commuter airlines, and the hub and spoke city proliferation raised the barriers further.

Not all these barriers are antitrust issues, though, but they serve effectively, with a host of lesser barriers, to make any future Peoples Express or Air Florida think thrice before challenging the incumbent airlines with conventional pricing and other appeals to consumers. If these challenges do come, it would likely be only after massive waves of consumer pricing and other abuses by incumbent airlines that should not have been allowed to occur in the first place; all this assuming new entrants can physically, physically enter the marketplace at airports.

Last week the Senate passed legislation requiring the airlines to file data regularly with the Department of Transportation so that the public can compare airline performances regarding delays, cancelled flights, lost baggage, denied boarding, and receive action as well by the Department regarding other deceptive practices. While this bill increases the needed data base for policymaking, it has few foundations for consumer power needed to effect change.

In addition, near monopoly conditions at certain airports such as Northwest at Minneapolis-St. Paul, seriously weakens any deterrent effect of such comparative data disclosure. I might add, even at airports where there are more competitors, studies of consumer behavior confronting comparative information like that indicate that it has very little effect. Very few people will wait six hours for another airline because it has a 15 percent lower cancellation rate to the city that they want to go to over the past six months, for instance.

Many Members of Congress know that the Executive Branch is not enforcing the existing antitrust and consumer protection laws for airline passengers. Now, what makes them think that legislation giving these officials more consumer rights to protect will receive any more attention? The preeminent lesson of 80 years of regulatory history in the consumer health, safety and economic arenas is this: unless the beneficiary class, i.e., the consumers, are given rights, remedies and organizing facility to directly affect the behavior of business and the respective government agencies, the regulatees will substantially weaken or even take over the regulators long before the revolving door phenomenon arrives.

To achieve the proper objective of consumer empowerment, the following recommendations are suggested for your consideration. These recommendations do not involve burdens on Federal budgets, enlargements of bureaucracies, nor other adjuncts to traditional nostrums, to wit:

One, a requirement that all airline tickets and/or ticket jackets bear prominently a description of an airline passenger organization chartered duly under Federal law which passengers can join to band together and have their own skilled advocates represent their interests. This method of solicitation is similar to ones legislated by Illinois and Wisconsin requiring notices to be placed in utility billing envelopes that describe and invite residential ratepayers to join a statewide, fully staffed consumer group to represent their interests.

This is the example, Mr. Chairman, in Illinois. This appeared in utility bills in Illinois a couple years ago. The law required electric, gas and telephone companies to put it in the utility bill a few times a year. People would open up their electric, telephone, gas, and water bill, and out would fall this postage-paid envelope with this rather provocative message: "Are you fed up with skyrocketing utility bills? Are you tired of hearing excuses?" Then there is a letter from the Citizen Utility Board, which is the consumer group chartered under Illinois law, Dear Friend. It articulates the case for joining this consumer group by residential ratepayers, and has a little application form. The minimum membership fee is $5. That gets you a vote to elect the council directors which hire the staff and set policy.

It is voluntary to consumers, does not cost the taxpayer anything. It does not even cost the utility anything because the consumer group pays for this, and the postage is not any extra because they do not use up all their weight when they send you their first class monthly bill.

This could be put on the back of the ticket jacket. You remember until recently you had all these ads on the ticket jacket, page after page? I guess they figured that was too heavy or whatnot. I do not see them anymore. But it is very easy to put this kind of notice on the ticket jacket, reaching tens of millions of passengers a year with an easy clip-out coupon.

A content neutral message on airline tickets would avoid a four to three decision by the U.S. Supreme Court last year invalidating a contentious message insert. This is an unfortunate decision which gave corporations more rights than individuals, real people. But we can get to that if you want to discuss it later.

I think the chances for reversal are good. Chief Justice Rehnquist wrote a very good dissent in the four-three decision, and the chances for reclarification or reversal are good.

Passenger information and action counters well located and appointed should be set up in various parts of major airports and at central locations at smaller airports. That means if you are an airline passenger, you can go to this counter, register your complaint, get information about your rights, and, if you want to, join the airline passenger group chartered by Congress under this proposed legislation.

It is interesting to note that three or four years ago I wrote to the CEOs of the major airlines asking if they would adopt this notice on their ticket jacket voluntarily as a kind of marketing device. One airline company could say see, we are first, we are consumer sensitive, here you are. All, including Gerald Grinstein, CEO of Western Airlines and former staff counsel to this committee under Senator Magnuson, did not respond affirmatively. Many referred to their regulation under the Federal Government as sufficient.

The second suggestion is airline consumers should be given a civil right of action under Federal law to pursue an unfair or deceptive practice that harmed them. Cornish Hitchcock, legal director of the Aviation Consumer Action Project, which I founded in 1971, has proposed legal language to several congressional committees, all on one page, I might add, that would give these effective rights and remedies, including a $1000 liquidated damages provision and payment of consumer's attorneys fees and costs if the consumer prevails.

That would not only deter bad behavior by the airlines, but it would tend to increase the likelihood that the Department of Transportation would enforce its own consumer laws more effectively.

The third recommendation, the Reagan Administration should drop what Alfred Kahn called its "sheer vindictiveness, a triumph of ideology over humanity and the interests of the flying public," and rehire the necessary number of fired air traffic controllers to improve the system's safety and reduce the delays which are costing so many passengers in lost time and frayed nerves. It is clear that air traffic is up significantly over 1981, and there are almost 4000 fewer fully qualified air traffic controllers now than in 1981, and these skilled people are needed.

We have had enough near collisions. We are now reading about jumbo jets missing each other by 50 or 100 feet; just last week in Chicago, at O'Hare, another near-collision of a few yards, and the Reaganites have played Russian roulette with the safety of air passengers long enough. Congress should step in here with a mandate.

Fourth, and finally, since 1985, according to the Public Affairs Office of the Department of Transportation, there have been airline merger applications numbering 20, many of them major mergers, presented to the department. All have been approved. The department has never finally disapproved a merger. One they had qualifications on and finally approved it.

This has come often in some cases against Justice Department recommendations.

Under its theory of potential contestability, all mergers could be approved as long as there is one other airline left in the country besides the merged one to provide potential contestability. This charade richly merits ending. Immediate transfer of this merger responsibility to the Justice Department will set the stage post-Reagan for some serious antitrust evaluation and enforcement before an oligopoly heads toward a duopoly.

As a perfect example, Mr. Chairman, of how a duopoly does not compete except perhaps for bagels and newspapers, look at the Continental-Eastern competition against Pan Am in the New York-Washington shuttle corridor. They have the same price, they go up in lock-step pricing. It is now, I believe, $79. No competition over price.

In summary, deregulation requires more attention to safety, antitrust, and above all, consumer empowerment, which is the engine for all the others. We need to remember that deregulation only meant economic deregulation. To give it the meaning of public anarchy and private oligopoly is to invite an unrestrained race to the bottom in matters affecting consumers, the matters that count the most.

Thank you.

The CHAIRMAN. Thank you very much.

Ralph, do you favor reregulation or not?

Mr. NADER. I do not favor the pre-1978 system which was basically a government-sponsored price cartel. What I favor is ways to enforce existing and enhanced consumer protection service requirements, ways to expand air traffic facilities and airports, and above all, a consumer empowerment organization such as I recommended. That is really what is so necessary to give Congress and to give the Executive Branch the capability to do what is right up against the powers that be, and also, to encourage more private negotiation between consumer groups, community groups and airlines, which I think for air service areas now neglected could reap some good benefits.

There are 90 towns and cities now that have no scheduled airlines post-deregulation, and much higher prices for many of the others. So we need this—I estimate that after the first year, Senator, there would be over a million people in this airline passengers group, at a minimum contribution level of $5 a year. That is a good force to provide the basis for change.

The CHAIRMAN. Well, I think we have got the force now to provide the basis. I have always been askance—I have followed consumer groups, support them and everything else of that kind, but I do not want as a professional politician to say government cannot work, in other words, that we must have consumer groups in order to get us to do our jobs. That is why we are having this hearing now, to learn from you, the consumer groups and all the interested parties, to see what is recommended other than getting another group to stay in touch with and everything else that we know about that you have brought to our attention.

I do know that the function of government is not to start another government. I think the function of this government is to operate and do its own job. And I rather resist the idea that we cannot do it, and I am trying by these hearings to bring these things out, to find out if reregulation is in order, and to what degree, and what would we do along the lines?

You have made some very good suggestions here. And we thank you very much. We will hasten along and get the last witness here before lunch.

Mr. NADER. Sir, I would like to submit this for the record.[1]

The CHAIRMAN. Yes, sir. That will be included in the record by reference.

Mr. NADER. And I might say that a consumer group is not another government, it is just an organized constituency to try to deal with a lot of organized, powerful constituencies, and it does not cost the taxpayers a cent. It will get more airplanes flying regularly to South Carolina, I can assure you.

The CHAIRMAN. That we can afford is what we need.

Very good. Thank you very much, sir.

Our last witness is Mr. Joel Murray, the Chairman and Chief Executive Officer of Simmons Airlines.

Maybe we can learn about the commuter airlines and what has happened.

STATEMENT OF JOEL MURRAY, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, SIMMONS AIRLINES

Mr. MURRAY. Mr. Chairman, I will be as brief as possible because I know the lunch hour rapidly approaches.

I regret that the committee and the press do not have my written testimony, but I was called only late last week, and I explained to the aide to the committee that I would not be in a position to prepare it.

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[1] The submission was not reproducible.

Let me in my opening statement tell you that Simmons Airlines, the company of which I have served as Chairman since 1980 and Chief Executive Officer since 1982, is a most successful product of airline deregulation. Back in 1978 when the company was formed, almost concommitant with the passage of the deregulation act, Simmons did not rank amongst the first 250 largest regional carriers. Five years ago Simmons ranked as the 49th largest regional carrier in the United States, and today we are the fifth largest regional carrier, our principal hubs being Chicago, where we serve as the American Airlines affiliate, and operate under the trade name American Eagle, and Detroit, where we serve as the affiliate of Northwest Airlines and operate under the trade name Northwest Airlink.

Today we are carrying a million and a half passengers a year. We are flying over 200 million revenue passenger miles, and we are grossing in excess of $100 million a year in revenue. Our fiscal year ended July 31 of this year, we reported net profits of $5½ million plus on income of $92 million. So indeed, Simmons Airlines, the company that I represent, is one of the great success stories, much of which is attributable to airline deregulation.

We serve today 36 cities in seven midwestern states, principally in Michigan, Wisconsin, Illinois, Iowa, Indiana, Ohio and Minnesota. Of those 36 cities that we serve, 11 of them we are the essential air service carrier, though not necessarily the only carrier, in those cities, and we are not subsidized by the Federal Government in any way for carrying the essential air service burdens in those cities, primarily because those cities are self-supporting, albeit in some cases at a pretty significant cost to the consumer.

In four communities in the midwest we are also the essential air service carrier, but we do indeed receive Federal subsidy under Section 419 of the Act.

It is my recommendation, Senator, in terms of the thought of reregulation, that five specific things be considered.

I do not believe that the Congress should renew the essential air service program in the form that it was enacted in 1978. If Congress deems it politically necessary to re-enact essential air service beyond October of 1988, then some realistic compensation should be required to be paid in the form of subsidy by the Department of Transportation. That is the only way we are going to be able to lower the fares to the consumer on some of these very sparsely traveled routes that qualify for Section 419 subsidy today.

But let me point out to you, Mr. Chairman, some of the ludicrous aspects of the essential air service program. I cite you one in particular. Simmons Airlines receives approximately $40,000 per month for flying two round trips per day between Jackson, Michigan and the hub at Detroit. Jackson, Michigan is noted mostly for being the home of the Michigan State Penitentiary, and in the absence of a prison break, our traffic in Jackson, Michigan amounts to 43 passengers per month over the last 10 consecutive months, or approximately 1¾ passengers per day or approximately less than one passenger per scheduled flight. For this we are receiving from the Federal Government today the sum of approximately $40,000.

To make matters worse, and to compound the problem, Jackson, Michigan is a mere 66 miles from Detroit Metropolitan Airport.

There is absolutely no reason for this government to be supporting essential air service in a community like Jackson, Michigan, and I can cite a number of other examples not quite as gross as this particular example in which the government is supporting essential air service by subsidy in very small communities that do not generate sufficient traffic to justify any air service at all.

More importantly, we talk today about our principal concern being safety. The skies are crowded. There is no ramp space or gate space at the major metropolitan airports. The elimination of two round trips a day from Jackson, Michigan to Detroit, Michigan will give us greater use of the air space, greater use of the air traffic control system, greater use of vital ground space and ramp space and gate space at the hub airport. If you impute into the system all of these very, very small cities that genuinely cannot support air service, the air space will be tremendously enhanced, as will the ramp and gate space at the hub airports.

Mr. Chairman, slot control became a term of the vernacular of the industry back in August of 1981 during the PATCO strike. At that time the FAA imposed slot controls on 22 pacing airports. Today, Mr. Chairman, we have 24 airports in the United States that handle in excess of 5 million passenger emplanements per year, Chicago being the first, and Las Vegas being the 24th. Chicago, Atlanta, Dallas-Fort Worth, Los Angeles, Denver, Newark, San Francisco, New York's LaGuardia, New York's Kennedy, St. Louis, Boston, Miami, Detroit Metropolitan, Minneapolis-St. Paul, Phoenix, Pittsburgh, Honolulu, Seattle-Tacoma, Washington National, Houston Intercontinental, Orlando, Charlotte, Philadelphia and Las Vegas should all be slot restricted once again. That is regulation for safety purposes.

It is not so much that we have problems with safety in the air, although we hear today more about near misses than the public ever heard before. We have safety issues on the ground where the ground controllers, who are the most inexperienced of the air controllers, are working, where we do not have enough concrete on the ground, not enough ramp space, not enough gate space.

Mr. Chairman, I testified last year before the Aviation Subcommittee of this Committee when it was considering the reauthorization of the Airport and Airway Improvement Act, and the Airport and Airway Trust Fund, and at that time back on November 13 of 1986 I testified that it was mandatory in connection with the reauthorization of that act to enforce Section 2201(a)(5) of that act which requires that all airport and airway programs be administered in a manner with due regard for the goals of fostering competition, preventing unfair methods of competition in air transportation, and preventing unjust and discriminatory practices.

It seems to me that we are confronted with two major problems here. If the Congress wants the passengers in the outlying, low density communities to receive the benefits of deregulation in terms of lower fares as do the passengers at the major hubs in New York, Los Angeles, Chicago, Atlanta and so forth, then the Congress has to be prepared to subsidize carriers like Simmons and other carriers that bring eight or ten or twelve passengers from a small community like Marquette, Michigan, which is about 300 miles from Chicago, to the hub.

We can bring them to the hub at the price we charge today, and we can eke out a small, 5 percent return on our investments, but we cannot bring them to the hub with lower fares unless you people decide to reregulate the industry, reintroduce Section 406 subsidy to allow us to do so.

So the gist of my testimony is if we are going to renew essential air service, if the Congress decides that the passenger in the outlying community is entitled to the same benefits from deregulation in terms of lower fares that the passenger receives at the hub, then we must require the Department of Transportation to realistically compensate the essential air service carriers.

From a safety standpoint, we must I think reintroduce slot controls at the 22 pacing airports that I mentioned. I would also like to see additional funds allocated to the FAA so that there can be greater scrutiny on maintenance and flight operations conducted by all the carriers. We simply have to hire more air traffic controllers to help break the logjam in the air.

Lastly, I think we have to conduct an intensive investigation that I think has fallen by the wayside into the control and the cost of the computer reservation systems maintained by three or four monopolistic carriers, and we must restrict the costs that these people are being permitted to charge all of the other carriers that use their system. The price is now $1.85 per reservation, and that computer reservation system has become probably the single, the single greatest profit center at United Airlines and American Airlines, and I think, frankly speaking, that the several computer systems in the country that are maintained by United, by American, by TWA and by Eastern and Delta are frankly taking advantage of all of the carriers that use those systems because we are being price gouged.

And this all went into effect, if you will recall, Mr. Chairman, when the CAB decided that the systems were biased, and in order to eliminate the bias, we thereby permitted the carriers that own the systems to charge a fee for their use. But nobody put any limitations or restrictions on the fee that they were allowed to charge, and we have gone to the point where they are charging unrealistic and unreasonable fees, and they are perpetuating a monopoly that nobody else can get into because of the enormous amount of capital that is required to make the investment to start one's own system. And without those systems we cannot get any feed—and I am talking about the entire industry. I am not talking about Simmons Airlines, because although we are an American Eagle carrier, we still pay the same $1.85 in addition to other fees which American charges us per passenger reservation made by travel agencies who use the SABER system, and likewise, we pay the same $1.85 to United for passengers that come to us with reservations made through the APOLLO computer system.

I will end my presentation at this point. If you have any questions, I would be happy to answer them.

The **Chairman**. Well, we appreciate it. The unreasonable fees in the reservation system we must look into further. That question has arisen before, and as you say, we allowed the fee but we did not put a cap on it. We looked into the reasonable nature of it, or whether or not it was unreasonable, and of course, that is the whole kit and caboodle relative to the active airline industry which we are having the hearing on.

You say it is too expensive to buy the computer. Is it too expensive to get the airline, the equipment, and everything else to come in to bring that competition? We are coming down to four or five carriers that are barely hanging on by the end of their fingers. And we have definitely created, instead of deregulation, an oligopoly, as they said here earlier.

You opened my eyes about cities like Jackson, Michigan. We may have to severely modify that 1978 provision. That was buying votes to get deregulation passed. I sat at this table, and you could not pay attention to everything that was going on. We constantly asked the question whether the medium sized town would be hurt. But everyone said service would improve, everybody would get cheaper flights and increased service. It turned out to be absolutely false. And then for the small places, like the Senator from South Dakota, we buy that crowd off by saying, well, we have got a subsidy program. But it does not pay. And it is not affordable, and it ought to be canceled.

We will look into this slot control recommendation that you make at that 22 airport group because that is what we had before. And that was in the nature of safety. That is why we had the perimeter rule at National. This whole crowd up here now does not remember that at all, and they think it is a matter of equity. It was a matter of safety that the perimeter rule was put in at National Airport, and when you had deregulation you did not say start all over, you just said let the market now take over from here.

Mr. MURRAY. And Senator, I do not mean to interrupt you, but I deliberately did not state in my testimony my preference, should these airports be once again restricted. Naturally my preference would be that buy/sell be permitted, but I tell you in all candor, Senator, that whether or not buy/sell is permitted, I think those airports should be restricted strictly on a safety basis.

The CHAIRMAN. Well, who controls the buy/sell, the owners?

Mr. MURRAY. Well actually, buy/sell is only authorized at the four airports that are restricted today, authorized by the FAA. I am in favor of buy/sell because it has helped my company grow because we are one of the stronger—we have one of the strongest financial positions of any regional carrier in the nation. I favor it. Having said that, the original purpose of slot restriction was safety. That should be its first, second and third purpose, whether buy/sell is in effect or not.

The CHAIRMAN. That was the slot restriction, but the slot allocation was all premised on the public convenience and necessity, that there was not a Jackson, Michigan with one and a half passengers per day. On the contrary, you had a sufficient number of passengers, sufficient demand to warrant that airline service where economically that particular carrier could come in with their equipment and staff, maintenance and otherwise, make a profit so it was safe. But it was for the public convenience and necessity of this community or that community or otherwise.

It was all well grounded and well founded. And that is where our starting point is. Now, where buy and sell has advantaged you, I have been sold out because I do not have those slots anymore. It has been sold out and you cannot get it. And now I am back to the second petard, and that is, how do you get it? Even though you might have buy and sell, you heard testimony after testimony here given at these hearings that they do not want to sell, and I do not blame them.

We had a parallel situation in the broadcast spectrum problem of trying to get a spectrum auction to raise monies for the fees. We have that auction, and quite obviously they could not, finally, after working all year long, we could not get a single vote on this Committee for a spectrum auction because it would be to my economic advantage to go in and bid the highest price at the auction if I was already an established broadcaster in that particular community. I was buying off my opposition to continue my particular monopoly and stultifying, in essence, then, the service to the viewing or hearing public as it may be.

In a similar fashion now in the airline industry, the buy and sell rule does not respond to what the public needs, particularly in the light of everybody going broke in the monopolistic train that we see and the mergers that we have. That buy and sell is a bunch of real robber barons sitting there with no chance for the public or small carriers or anybody that wants to serve the public.

Mr. MURRAY. Well, I can tell you that the price of O'Hare slots has doubled within the last year, and that the——

The CHAIRMAN. And how many Simmons Airlines, commuter airlines will come into the service with that doubling of the price?

Mr. MURRAY. Well, there is a——

The CHAIRMAN. Are you the exception or are you the typical commuter carrier?

Mr. MURRAY. Well, we are the exception to the extent that we have grown very rapidly and been very successful at it. At O'Hare there are really only three commuter carriers left: Air Wisconsin, if you still consider them a commuter instead of a national carrier, which does business under the name United Express; Simmons, which does business as American Eagle; and Britt, which is owned by Texas Air, or Peoples Express, which is now owned by Texas Air, and there are one or two other very small carriers with only a handful of slots.

We fly 68 daily round trips at O'Hare. Britt has more slots than we do, as does Air Wisconsin, but they have been in business substantially longer than we have. And at O'Hare, Senator, there is a distinction between air carrier and commuter slots which the FAA created for reasons only known to the FAA. One thing has nothing to do with—it has nothing to do with safety, but for some reason they have designated air carrier slots as being slots that can be flown by aircraft of 56 seats or greater and commuter slots 55 seats or less. That way when they opened up additional slots they gave them to the air carriers and not to the commuters and thereby deprived the small cities that feed the hub airport from additional service which they might otherwise have received had the government decided to open up additional commuter slots.

Lastly, Senator, going back to that Jackson, Michigan point, I am confident that you will find a number of cities that are being subsidized today that no reasonable person would subsidize and that every reasonable person would strike from the rolls of essential air service.

The CHAIRMAN. We ought to be getting in there and—I do not want to start any subsidy, by the way. I understand the reason you are saying, that if we are going to have to continue that, it has got to be subsidized. That is the last thing this government wants to do now. We are not paying the regular price for defense or law enforcement or anything else around. We have not paid the bill around here in the last several years—since Lyndon Johnson left town. I can see him now. We were met in December of 1968 and were frightened to death that guns and butter were going to cause a deficit, so we put on a 10 percent income tax surcharge just like that, ten minutes. And we left Richard Milhouse Nixon a $3.2 billion surplus.

Mr. Murray, I appreciate very much your appearance here today. Thank you a lot.

Mr. MURRAY. Thank you, sir.

The CHAIRMAN. The committee will adjourn.

[Whereupon, at 1:00 p.m., the committee adjourned subject to the call of the Chair.]

SAFETY AND RE-REGULATION OF THE AIRLINE INDUSTRY—NEXT PHASE OF DEREGULATION

WEDNESDAY, NOVEMBER 18, 1987

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:00 a.m., in room SR-253, Russell Senate Office Building, Hon. Ernest F. Hollings (Chairman of the Committee) presiding.

The CHAIRMAN. Good morning. The committee will please come to order.

Our first witness this morning is Ms. Edith Page of the Office of Technology Assessment. She is a Project Director for Transportation Studies.

Ms. Page, would you come forward, please?

Good morning, Ms. Page. We welcome you to the committee. Your statement in its entirety will be included in the record, and you can highlight it as you wish.

STATEMENT OF EDITH PAGE, PROJECT DIRECTOR, OFFICE OF TECHNOLOGY ASSESSMENT

Ms. PAGE. Thank you, Senator.

Good morning. I am pleased to be here to tell the committee what OTA is learning about aviation safety in a competitive environment. We were requested to undertake this study about a year ago, and I am going to tell you some of the highlights of the issues that we have identified so far.

The CHAIRMAN. That was the House Public Works Committee?

Ms. PAGE. Yes, and your committee has endorsed this study, and the Transportation Subcommittee on House Government Operations was a co-requestor. The three subcommittees on the House, Public Works, Surface Transportation, Oversight, and Aviation, all were co-requestors, and in your committee, the two subcommittees were co-endorsers as well.

I would like to start off by saying that we have looked very thoroughly at all the Federal data resources on safety related to the airlines. Using the conventional measures such as accidents and fatalities, we concur with the many people who have said that safety by these measurements has maintained a very high level since economic deregulation.

In fact, the fatality level was reduced slightly in the early 1980s.

Because the data showed that there was no real change, we began to try to develop other means of determining whether there were stresses in the safety system that would warrant making suggestions for policy options to Congress for changes in Federal programs and regulations that they might want to consider. Here are some of the things that we have been finding.

The total takeoffs and landings at towered airports are now lower than they were in 1978, but the number of commercial operations has increased from 13 million to 19 million annually over that time. This means that deregulation is indeed working. More citizens are able to fly on commercial flights, but it also means that the increase in operations that we see at our airports and that is putting such a stress at peak travel times is primarily due to commercial flights.

The general aviation and military flights are a lower proportion of the total than they used to be. Thus the Federal responsibility for the safety of commercial travelers is greater than ever. The importance of the FAA inspections and the Federal airline regulations is greater as well, if you assume that we want to continue to take good care of these additional commercial travelers.

I mentioned the stress on some of our busiest airports. Airlines have almost universally moved to hub and spoke operations. Some airports that were already busy because they were in large cities that are origin or destination points have now become hubs as well.

This through-traffic means that several airports already operate at over 100 percent of designated capacity during peak hours.

We know that there are plans afoot to build more runways and to put in technological improvements that will help to increase the productivity of our existing airport system. However, there are tremendous delays and difficulties associated with putting in new runways and with expanding operations at airports. Local jurisdictions object to the noise. There are land use problems. These are very, very difficult political issues.

The point of all this is that if we already have some airports operating at 100 percent of capacity, we are going to have even more airports suffering from congestion in the future as the public continues to take advantage of lower fares and fly with greater frequency.

There are some rearrangements of the air space that the FAA has developed. The one that has been implemented is the East Coast Plan. It has been quite successful in reducing delays in the New York airport and the Washington airport areas.

The results of the implementation of that plan, however, show how difficult it is to make rearrangements in one part of the system without having a substantial impact on another part of the system. We have learned that congestion in the Philadelphia area has increased severely because the air space over Philadelphia has been rearranged and reconfigured to accommodate some of the changes in flight plans for the New York and the Washington airports.

As part of our work to supplement the Federal data, we sent a questionnaire to airlines and to pilots and mechanics. We learned from one small airline that flies into Philadelphia from rural Pennsylvania cities that delays have become such a substantial problem for them, due to the congestion in Philadelphia, that they have had to cancel two of their daily flights. In bad weather when they must fly by instrument flight rules, they have to cancel one or more of the remaining flights just to keep even an hour behind schedule.

Their response to the survey was very interesting because it highlighted what I think may be an increasing problem for the small communities served by small airlines—access to those busy hubs. Regular access to the big hub airports, which are primary transfer points, is essential for small airlines to continue to do business. Small commuter lines are being substantially hurt by hub congestion and by the fact that they cannot keep frequent, regular flights going.

I was relating this to an economist, who said, "Well, perhaps the automobile is the most efficient mode of transport for people on those short trips." He went on to say, however, that if we were going to decide that the automobile is the most efficient mode of transport, this would have tremendous implications for access to air service for smaller communities where people need to transfer through hubs. Such decisions need to be thoroughly aired and discussed with a great deal of public debate before we try to limit flights at the busiest airports.

I am going to speak very briefly about safety indicators other than accidents because we looked very hard for them.

Now, Senator, do you want me to stop?

The CHAIRMAN. No, ma'am. Please continue.

Ms. PAGE. We began to despair of finding good data in the Federal data systems on safety indicators other than accidents. The records kept on inspections, one of the places we looked right away, have not been consistently kept, nor are they thoroughgoing. So it is very difficult to use them as an indicator.

One indicator that has been kept with enough consistency to permit some analysis is near mid-air collisions. There has been a great deal of discussion in the public press and in the Congress about the increases in near mid-air collisions.

We did some comparative analysis and learned something that makes perfect sense, to me anyway; that is, that the number of near mid-air collisions involving commercial aircraft tracks precisely with the increases in commercial air traffic. In other words, if you put more commercial airplanes in the air at the same time, the number of near mid-airs is going to increase.

We also have learned that mid-air collisions themselves account for about only 1 percent of the air accidents. This is a very small percentage.

How much should we worry about an increasing number of near mid-air collisions as a safety problem? The safety system for air travel is a very closely interrelated system with many different parts. If we are going to have more planes in the same air space at the same time, we have to make sure that all the other parts, the technologies and the people involved, are working at top performance in order to keep the near mid-air collisions from becoming collisions.

The final point I want to make is that we have found from our questionnaires a number of industry changes since deregulation. Some of these were a bit of a surprise to industry itself, and they have had to make substantial readjustments. Any time adjustments are necessary, it puts stress on the people who are having to make the changes.

We learned from the answers to our questionnaires that every airline has taken an individual approach to resolving the problems that they confronted. Some airlines have reduced or eliminated engineering or meteorological sections. They have arranged with manufacturers to provide engineering capabilities and with outside resources for weather information.

Increases in hub and spoke operations and additions of different types of aircraft to the fleets as a result of mergers has meant the need to redeploy maintenance personnel or to use contract maintenance with greater frequency as unfamiliar aircraft are added to fleets.

Maintenance workers reported economic and personal hardship because of a need to change locations. Pilots complained about delays in repairs because maintenance personnel at spoke locations may not have the parts available at that place or the expertise to complete the job.

We did find from the questionnaires that for most pilots and mechanics, there are severe stresses associated with the changes that they are facing. The reasons for the stresses that they gave range from pay levels and poor communication with management to distress at what they view as a reduced commitment to safety on the part of management.

Safety data shows that human error is involved in well over half of all air accidents, but the Federal programs to analyze and understand the impact of these types of stresses on performance have languished for several years.

Finally, I would like to raise the issue of the shrinking pilot work force. Small airlines are experiencing close to 100 percent pilot turnover annually. Their trained pilots are hired away by a larger airline for a higher salary almost the minute they complete the necessary training and the required hours of experience.

The small airlines who responded to our questionnaire said that this has put unbearable strains on their training facilities. They just have to keep training and training and training to keep their pilot personnel at the level it needs to be.

It is a major source of concern for these executives. It is possible that the Federal Government might want to take an active role in encouraging airlines and educational institutions to develop cooperative programs to assure a supply of trained personnel for the country's air system.

Demographics tell us that that age group is going to continue to shrink, and this is an employment problem that is going to face many trades and professions that require a high level of training.

As I said earlier, our work is not yet complete, and these are issues we feel the Congress will want to address.

I would be happy to answer questions.

The CHAIRMAN. We thank you very much. We have Senators Wilson, Kasten, McCain, Adams and Exon. Senator Adams has to go to the floor; his bill is up. So I am going to yield my time to him.

Go ahead, Brock.

OPENING STATEMENT BY SENATOR ADAMS

Senator **Adams**. Thank you very much, Mr. Chairman.

Mr. Chairman, I would like to thank you for holding this third hearing on the airline industry and re-regulation. The health of the airline industry, the safety of air travel, and the quality of air service to our communities are issues of great importance to all of us.

Our first hearing focused on airline safety. It was a sobering discussion, as we heard about pilots directed by their carriers not to report safety violations, deferred maintenance in the industry, overcrowded airports and understaffed air traffic control operations.

It was also a timely discussion, as the recent accidents in Detroit and Wisconsin demonstrate. In my own state of Washington, a tragic accident recently took the lives of the President of Western Washington University and two of its Vice Presidents. Unfortunately, these accidents won't be the last ones if the current situation with the air traffic control system continues. Nationally, in the first nine months of this year near-collisions were up 37 percent over the same period last year.

Mr. Chairman, I think that it is important and very appropriate that we are dealing with the issues of airline safety, service, and deregulation in a comprehensive manner. They are interrelated. Our second hearing focused on the quality of airline service and the financial condition of the airlines. Being frequent flyers ourselves, we all have our own stories about delays, lost baggage and canceled flights. We are also inundated with countless complaints from our constituents regarding poor service and, even worse, the lack of any service in some of our smaller communities.

Mr. Chairman, before we begin with the witnesses today, I hope I might provide a little historical perspective to our discussions. I was Secretary of Transportation when Congress was considering airline deregulation. I was not entirely happy with the Airline Deregulation Act, but we did recognize certain fundamentals at the time. Reliable air service is a necessity for our cities and towns, it is not a luxury. It ties our nation together and is critical for diversifying the economic base of small and medium sized cities.

Unfortunately, the airline industry has turned the traditional fare structure upside down. We used to have a "long haul, short haul" rule that prohibited a carrier from charging more for a long distance route than a shorter distance midway. Now the high density routes between major cities are being subsidized by passengers travelling to small towns. As an example, if you want to fly to Jacksonville, it will cost you $279 or more, and you will have to go through Atlanta. If you want to go to Miami, 1,000 miles farther, you can fly there in less time and you can get a ticket for as little as $99.

In addition, if you have to fly to your destination for business, or for an emergency where you cannot plan it far in advance, you will probably be sitting in the same section as someone who is getting the same service for one third the price.

Mr. Chairman, I hope that we can examine some of these issues, as well as the problems of increasing concentration in the industry and the congestion that has been caused by the development of the hub system.

What we are looking for is a system where everyone can travel at a fair rate. I do not know if "re-regulation" is the way to go; but I would not count it out. As I have stated before, transportation has a different impact than other industries. The transportation industry needs to have stability because transportation is the key to other industries. Give me control of the transportation to an area, and I will take control of the industries in that area. That is why transportation regulation was developed in the first place and it is why we cannot completely abdicate responsibility to regulate in the future.

The CHAIRMAN. I have a statement from Senator Pressler.

[The statement follows:]

OPENING STATEMENT BY SENATOR PRESSLER

Mr. Chairman, thank you for scheduling this hearing addressing the future of the air transportation industry. This third in a series of hearings on the safety and reregulation of the airline industry comes at the time when a great deal of attention is being focused on air service. A most unfortunate accident occurred last Sunday which was very destructive. I know that all of us extend our sympathy to the families and friends of those who died because of the accident. This tragedy and the Detroit accident which occurred just a few months ago are painful examples of the crucial need to address airline safety measures. It is far too apparent that improvements are necessary.

Throughout this series of hearings on the safety and reregulation of the airline industry, we have focused on several key issues and have heard from representatives from the Administration and the Industry. I am looking forward to hearing from today's witnesses and having their views and suggestions regarding the future of airline service.

Mr. Chairman, I commend you for holding today's hearing and hope that we can work together toward a common goal of improving our overall air transportation system.

Senator ADAMS. Ms. Page, it is a pleasure to see you again.

Ms. PAGE. Thank you, Senator.

Senator ADAMS. I am very much in support of segments of your statement. I have just one question because my time will be limited and I do not want to delay my colleagues.

It was mentioned by Mr. Burnley yesterday and is of great concern to me that there seems to be a thought floating around that we can create more airports of significant size to handle our capacity problem. Our real constraint at the present time and danger is landing and takeoff at crowded airports and overusing them for hubs.

From looking at and reading your statement, is it the conclusion of the Office of Technology Assessment that we cannot plan on building any major new airports in crowded regional areas?

Ms. PAGE. I am reluctant to give an unequivocal yes, but——

Senator ADAMS. I do not want to trap you, but let us try to get the facts down.

Ms. PAGE. I understand exactly what you are saying.

Senator ADAMS. We were at the conclusion in 1977 that there were three airports that had been proposed. They had been on the drawing boards for 10 years. One was the Everglades in Miami, one in New England someplace near Bradley Field in Boston, and one in the Los Angeles/San Diego area, that horrifying place where we have 10 airports, eight of which are in the top 10, as I remember, of the United States.

All three of those failed, and as far as I know all three of them are finished. The one that was to be in St. Louis across the river in Illinois was deauthorized and is gone.

I know of none, so I just wanted a confirmation. I was not trying to press you into a position of being against your office. I just want to know whether your conclusion agrees with mine.

Ms. PAGE. I think it does, Senator.

Senator ADAMS. So that means we must use the capacity there by control of slots, by control of hubbing, by control of air flow because we have to utilize what we have in land and taking into account the conditions at the airport.

I say that because if you do not increase capacity, the place that you overload the system is in safety and flying as opposed to maintenance and everything else. You are flying because you do not have enough slots and you fly in weather that you should not be flying in, you fly with people that should not be flying because you are at the capacity edge.

I just want to know if your conclusions are somewhat similar to mine. Now I am finished. Say whatever you like.

Ms. PAGE. Because our final report will not be issued until this spring, I am reluctant to use the word "conclusion".

In my testimony, however, I indicated that this was the major intractable issue we feel the system faces. With your usual acuity, Senator, you have picked that up right away.

Yes, we think it is unrealistic to think that major new airports will be built soon. Large new airports would have to be at some distance from the major cities simply because there is not the land space available close by the major cities.

We are going to have to deal, for the immediate future certainly, with overburdening of our system in certain areas, and there are going to have to be very hard decisions made about how we are going to use that limited air space because we are not going to have lots of new runways available to us.

Senator ADAMS. Thank you, Ms. Page.

Thank you, Mr. Chairman, for your courtesy and to my colleagues. I appreciate it.

The CHAIRMAN. Thank you, Senator.

Senator Wilson.

Senator WILSON. Thank you very much, Mr. Chairman.

Ms. Page, your testimony, I think, has focused quite properly on the difficulties arising from the tremendous increase in commercial airliner traffic, the good news being that more and more air travel is available to more and more people at more reasonable prices.

That obviously is a great blessing for many. On the other hand, it is producing the kind of pressure that has been leading to real safety problems. I quite agree with your comments, and with Senator Adams, who has just described these problems as horrifying. I took slight umbrage at that, but I agree that the airspace is busy. I fly into it twice a week, in and out.

The concern is that in my state, which I do not think is representative in many ways, the volume of general aviation is also increasing at a horrendous pace, which is a very good thing in many respects. It permits an awful lot of business travelers who would otherwise be competing with other passengers for air space to go on a different schedule.

The problem obviously is that with the tremendous increase in commercial traffic and the tremendous increase in general aviation in certain areas, Southern California being one, there is just more and more competition for space.

I am very much concerned that we are not doing what we should be doing in terms of building more airports, more runways. All the problems that you mentioned are quite real.

I think of Palmdale. When it was first on the drawing boards, it was way, way out. But the population increased in that area, as it typically does wherever you put an airport. That is quite understandable. Airports are economic generators.

Not long behind it will come, as a result, residential construction with all the accompanying problems that that brings.

The most unpopular thing I ever tried to do was move an airport from the heart of downtown San Diego where it was wonderfully convenient for 90 percent of the people and painful for 10 percent living in the immediate environment.

The concern I have, though, is that until such time as we are able to build more airports, which will take a long time, we are really going to have to determine what the safe capacity is; safe when the weather is clear, safe when it is not.

I gather what you are offering as the most reliable and predictable way to decrease the pressures is the assignment slots; is that correct?

Ms. PAGE. That is the primary solution that has appeared so far. There are going to be some technologies, improvements that will enable a slight reduction in some of the separation distances, although those may have already been agreed to for certain aircraft with those designs.

There are a few other productivity improvements that can be wrung out of the existing system and that technology can fix, but I think my major message really was that we do have to face very hard decisions about how to allocate that space, and slots is the primary way I can see to do it at this point.

Now, I may tell you something different in the spring when we have completed the entire report.

Senator WILSON. When you have completed the report, will it have looked at the particular problem you have mentioned of smaller carriers training personnel only to have them hired away by larger, higher-paying airlines?

There seems to be a problem just in terms of the adequacy of the training or at least of the experience of some pilots. I note that in this most recent Denver crash, the National Transportation Safety Board has already made a preliminary finding that one possible reason for the crash was a lack of pilot experience.

While I do not have a quarrel with your preliminary findings because I think they are pretty logical, it seems to me that it puts increasing pressure on the FAA to move as rapidly as they safely can with the implementation of the TCAS II and then the TCAS III.

It seems to me that these in-cockpit warning systems offer a far greater measure of optimism that we will be able to do something other than by physically reducing the traffic.

Ms. **Page**. TCAS is one of the technologies I was referring to when I said there are some technological approaches that will help with the congestion problem.

TCAS certainly can help us with the near mid-air collisions. I agree with you. I think that those technologies are important to move ahead with as quickly as is practical.

The participants in our workshops, in particular one that dealt specifically with technologies where TCAS was much discussed, indicated that they felt that there were certain technologies that had had major impacts on safety. Certainly the ground proximity warning system is one such that was implemented in the mid-1970s.

They think TCAS could potentially have a similar impact. It is important to remember that as of now, mid-air collisions, however, are only a very small percentage of the accidents.

Senator **Wilson**. A small percentage but a hell of a loss when it happens.

Ms. **Page**. Absolutely. Every accident is a terrible tragedy, a great loss.

Senator **Wilson**. I will cease, Mr. Chairman, but it would seem to me that where you do have large commercial hubs and they are carrying full major wide body aircraft, that there perhaps needs to be some adjustment of the slot schedule there because the risk is enormously increased if there is a mishap.

Ms. **Page**. It is a very difficult issue. There are tremendous economic implications associated with that slot allocation.

I am reminded of one vignette of an airline that, in an attempt to cooperate with the request by then Secretary Dole last spring to do what they called "depeak" at the busiest airports, did move one of its flights 15 minutes later in a peak hour. That was all, really, that had been asked of them; just change your flight departure times by 15 minutes.

This airline chose to go 15 minutes later and took a shellacking because its flight did not show up in the computerized reservation systems as one of the flights leaving early in that peak period. Its bookings were reduced so substantially that within three weeks it had to make another adjustment in schedule.

I offer that as an example of the enormous economic impact that those slot allocations have.

Thank you, Mr. Chairman, and thank you very much, Ms. Page.

The **Chairman**. Thank you.

Senator Kasten.

Senator **Kasten**. Mr. Chairman, thank you.

First of all, thank you for coming to testify and for your help on the transportation of hazardous materials waste issues. It is a pleasure to have you before us. Even though it is a preliminary report, I hope it will be very, very helpful to us.

I want to, if I can, follow up a little bit more on what Senator Wilson was just saying. Specifically, in your report you say that, "Issues of adequacy of training and levels of experience are closely related to the quality of human performance under stress. Projections tell us that the shortage of trained and experienced pilots is going to get much worse before it gets better."

Reading the Washington Post this morning, I cannot possibly figure out how, at least with this particular airline, it could get much worse given that the pilot of the Continental Airlines jet that crashed in a snowstorm in Denver had flown 33 hours and 23 minutes as a captain of the DC-9 jet, and the co-pilot of the same plane had flown 36 hours and 36 minutes in this aircraft.

I do not understand how this could happen. Further down the article quotes Jim Burnett, and says that the report on the check flight of one of the pilots stated that this individual needed "further experience before he could be rated as a captain".

Evidently, the airline disregarded that question and went forward, promoted him to captain, and we now have this tragic loss.

Now, is this what you are predicting is coming, or are you telling us in this report that it could get worse?

Ms. PAGE. Like you, Senator, all I know about Sunday's tragedy is what I have read in this morning's paper.

I believe that the pilot did go on and take another checkride subsequent to the time when they said further experience was needed. He did pass on the second one.

Senator KASTEN. I do not think either of us want to quarrel about what happened. I am asking you if this is what you are predicting, or are you saying this kind of activity is standard and is going to get even worse based on what your analysis to date has proven?

Is this standard procedure for these airlines right now?

Ms. PAGE. For some. I want to stress that the responses from the airlines have been very valuable to us in providing additional information. They indicate that each airline has a very individualistic approach. Some of the airlines have very stable, very well-experienced work crews.

The commuters, as I mentioned, are the place where the stresses converge most strongly because that is the step at which pilots are eligible to move up to the larger airlines.

Senator KASTEN. The co-pilot in this case came out of Rio Airlines, but Rio Airlines must really be worried if this is what is happening at Continental.

Ms. PAGE. They are. They are. I cannot tell you how eloquent the responses of the commuter executives were. They are small enough airlines so that in most cases, the person who answered the questionnaire was the president or the chief operating officer.

They are very worried about this. They know that this is a dangerous situation.

Senator KASTEN. Is it standard practice now that a person could be a pilot after 33 hours and a co-pilot after 36 hours? Is this what is happening over all in the industry today, or is this one example of what you are predicting is about to happen?

Ms. PAGE. This is an example, but it is not atypical of some airlines.

Each of the pilots, as you rightly pointed out earlier, had had sufficient experience in flying time to qualify for their positions. It was their experience in this particular type of aircraft that was so severely limited, and this particular airplane, as I understand from

Sunday's paper, was an older model that did not have some of the equipment such as forward slats.

Senator KASTEN. Is there a governmental standard or an airline standard or a Pilots Association standard or is there some kind of an agreed-to time? This pilot had 12,000 hours. He was a Navy Reserve pilot.

Obviously they were qualified pilots, but the question which is implied here is that in an emergency when other stresses are at stake, it may be that a little bit more time for one or the other might have helped a little. I do not know if that is the case.

Ms. PAGE. It certainly might have.

Senator KASTEN. Are there standards?

Ms. PAGE. It is very complicated, and there are a tremendous number of ways in which the different stresses interreact. In this case, my assessment on the information so far is that it was their experience in this particular type of aircraft that was so severely limited. That does happen, and it is going to continue to happen as we have pilots with less experience as a regular part of the work force.

Senator KASTEN. Are there standards set either by the industry or by the government that pilots have to meet?

Ms. PAGE. Yes. The FAA has minimum standards for both the number of hours required for pilots to be captains and for them to be co-pilots, and they also have to pass a training checkride, with a qualified pilot who is certified by the FAA as a check airman to be qualified to fly a particular type of aircraft in that particular position.

That is what those gentlemen had done but very recently.

Senator KASTEN. Mr. Chairman, my time has expired.

I think that maybe one of the things we might want to take a little bit of time to look at is exactly what these standards are, particularly if the standards relate to the smaller airlines.

The other question we should look into is whether the smaller airlines are absorbing the costs of training pilots who then leave to join the larger airlines?

We have problems already with the costs small commuter flights must meet in order to fly into hub airports.

If it is the small commuter airlines that are training the pilots, that is an additional cost for them. That might be one of the reasons why our flight from Chicago to Green Bay costs more than a flight from New York to Los Angeles.

Mr. Chairman, thank you.

The CHAIRMAN. Thank you.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Ms. Page, I did not want to get into this line of comment, particularly in light of the accident that just took place which we have not yet had the chance to investigate; but I think you would agree that any pilot with 12,000 hours of flight time should certainly in the checkout and the training that one undergoes in order to be qualified in a particular piece of equipment, as we call it, would be qualified to fly that aircraft.

Would you agree or disagree with that?

I say that, Ms. Page, as a pilot with 4,000 hours of flight time and having flown numerous different kinds of aircraft.

Ms. PAGE. I agree with you that that is an experienced pilot.

Senator MCCAIN. To say the least, Ms. Page.

Ms. PAGE. I really do not want to get into a discussion of type ratings, because that is a contentious issue between the Pilots Association and some of the manufacturers right now.

I would agree with you that he was certainly an experienced pilot.

The issue I wanted to raise through the testimony was the fact that maintaining an adequately trained work force is a severe problem and an expense for the airlines and that that is an issue about which it is important to be concerned.

Senator MCCAIN. I agree, Ms. Page, and I also would remind you, as I am sure you remember, that we have gone through these various expansions and contractions as to available pilots for the airlines in the past.

Ms. PAGE. Right. It is cyclical.

Senator MCCAIN. We lost the large number we had following World War II and Korea and now we are losing the Vietnam group. This loss will continue, and will be exacerbated by the limited number of military pilots as opposed to the numbers that we used to have previously, which will place an increased burden on other methods of training pilots.

Fifteen years ago, almost every pilot in the cockpit of a commercial airliner was a former military pilot. Now those numbers are dramatically reduced. From what I have seen, from one-third to one-fourth now are military pilots, whereas the others find their training somewhere else.

I would like to get back to your statement, if I could, about safety indicators. You mentioned, I think quite accurately, that the technical and increased runway construction options for handling increased traffic are very limited.

Then you say, "Thus, Congress may want to consider additional means of limiting peak air traffic to keep the exposure as low as it has been for the past few years and must continue to take a high level of responsibility for safety."

I certainly agree with your statement, but I think it might be very helpful if you were a little more specific, because I think we have been grappling with this problem as to what additional means of limiting peak air traffic are.

Perhaps you could illuminate us on some of the options you feel we might have.

Ms. PAGE. Senator, those are the really difficult issues. When we have completed our study, then I will have policy options that I am comfortable presenting to you. I would prefer deferring on what some of those possibilities are until that time.

Senator MCCAIN. I will certainly look forward to receiving those recommendations from you, because if we can solve that one, we will go a long way towards resolving most of the concerns that the American people have not only about safety but also concerning the delays and all of the other problems that have been associated with the dramatic expansion of air traffic since deregulation.

I have no more questions. Thank you,

The CHAIRMAN. Thank you.

Senator Exon.

Senator EXON. Mr. Chairman, thank you very much.

Ms. Page, thanks for coming here today. I am looking forward to your full report.

Also, I understand you are working on a report over there with regard to truck safety.

Ms. PAGE. That is right.

Senator EXON. When is that one due for release?

Ms. PAGE. That will be submitted to our board in late spring, and it should be ready for you by next summer in time for action in this 100th Congress.

Senator EXON. Thank you. That is going to be very helpful.

In your review of overall safety matters, how much time and how much effort has been put into an examination of happenings not in the sky?

You know, we are concerned, and legitimately so, about the collision of aircraft, landing and takeoff problems that we have experienced, not the least of which has been referred to on numerous occasions here this morning with what happened in Denver.

How much of your time and effort has been put into examination of maintenance of aircraft, the preparation for going into the sky?

Along with that, how much time has been put into the matter of true experience? Is there any indication that rules and regulations in this area should be tightened?

Both maintenance and experience of the crews have a critical bearing even if all other factors are A-okay.

Ms. PAGE. Maintenance has been the most difficult issue for us to acquire information on. It, however, was one of two major issues that we were requested to look at specifically.

So the answer to your question about how much attention have we paid to it is, "substantial."

There are tremendous difficulties, and I will outline a few of them and tell you what we are learning and how we are learning it.

The data that are kept related to maintenance have a couple of different forms for reporting. One is the financial reporting of how much money has been spent on maintenance. We knew before we looked at the data, that it would be inconclusive.

Because different airlines have different accounting procedures, although there are similar requirements for the reporting of the data, we knew that we would not be able to tell very much from that data.

What we have learned from it is that while there was a slight spending dip for some airlines in the early 1980s, it has been on a slight upward trend for the rest of the time between then and now.

We also have looked at the FAA inspection and maintenance reports, the service difficulty reports, and every reporting system that we could think of that has to do with maintenance problems.

The data are not very complete, we have learned, because one of the questions we have asked the airlines on the questionnaire was related to the numbers of some of these events. We promised them confidentiality because this was asking for very sensitive information, but the numbers that the airlines gave us just do not fit exactly with what the FAA data shows.

We are using all the answers from the questionnaires, the three different groups to which we sent these. We have a contractor doing case studies on airlines for us. The case studies will pay particular attention, at our direction, to the maintenance.

We have looked at every bit of financial data we can get our hands on about maintenance. What it tells us and what the questionnaires tell us is that the experience level of the maintenance personnel has not been lowered or diminished by what has happened since deregulation.

The merging of fleets due to mergers and acquisitions of different kinds of aircraft has caused some mechanics to need retraining. Some of the mechanics reported to us that they did not feel their retraining was adequate for the new fleets.

As I mentioned in the testimony, the need to have access to substantial maintenance at spokes is occasionally a problem. It simply is not easy to do on the scale required.

We also have learned that many airlines regard a good program of preventive maintenance and regular maintenance as a very cost effective means of doing business; that is, if they keep their aircraft in good condition, they are not going to have delays, and they are going to be able to run things more smoothly.

We have found, in short, a very varied picture, Senator. We will examine what we have found in light of the current regulations and make a further assessment in the coming months.

Senator EXON. My time is up. I have just one last question which I think you can answer with a brief yes or no.

Have you been able to establish any correlation between those airlines that you think are doing a good job of preventive maintenance and maintenance in general? Are those the more profitable airlines? Is there any correlation between the balance sheet and the maintenance sheet?

Ms. PAGE. No, we have not seen a correlation, and that has been one of the interesting results of the study.

There are some airlines that make money from whose personnel we heard some negative comments; and there are some airlines from whom we heard universally positive comments who do a dandy job of maintenance.

So the inconsistency in the lack of relationship to the balance sheet has been one of the more interesting findings.

Senator EXON. Thank you, Ms. Page.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Ford.

Senator FORD. Ms. Page, when FAA sets the standards for the pilots, is that just an in-house standard or does that have input from the ALPA or commercial airline owners and then they hold hearings and it is promulgated from that?

How do they set the standards for their pilots?

Ms. PAGE. In varying ways. The standards for pilots and for training have not been changed in a number of years. The new Administrator, Mr. McArtor, has put training standards among the top eight points which he wants to address in the remaining months of his tenure.

Usually the regulations are set by the normal methods; that is, they are developed by the FAA, often in consultation with industry and the pilots, because the safety responsibility rests with the FAA as well as with the different parts of the industry. Then they are published for public comment, and the regulation is issued as a result of the comments.

This has in recent years taken an almost interminable time, and it has been a virtually unanimous consensus of our workshops and our meetings that the regulatory process is taking far too long these days.

Because of these problems, they have in a couple of instances chosen to use negotiated rulemakings which are a little bit——

Senator FORD. Negotiated with whom?

Ms. PAGE. A negotiated rulemaking is sort of like a labor negotiation in my mind; that is, the affected parties and the FAA all sit down together, and they say, now these are the things at issue, this is where we want to be.

Senator FORD. Would that be a single airline? Would that be an association?

Ms. PAGE. It is usually the association, the Air Transport Association, the Airline Pilots Association.

Senator FORD. Do they all come in together or separately?

Ms. PAGE. They come in together, and these are grueling sessions, Senator. They sit around, and they hash these issues out. Eventually, they come to some agreement.

I asked the Pilots Association representative after one such session if he was happy with the results. He said, "I guess so; we agreed to it."

I think that is about the best any participant in such a session could say, because the reason you need a rulemaking is to move people from where they are now to another point. As I have said several times, changes have a different impact on every part of the system and on every different player. Each is going to respond differently and each one is going to have to give something in order to reach that agreement.

That process probably has the same amount of input as the comment process, but the ultimate rulemaking is one that has been negotiated through this face-to-face process rather than through promulgation of the rule; written comment, hearings, and then a response on the part of the FAA.

Senator FORD. Do you think we would have this lack of response if we could have had an administrator on board for a longer period of time?

Ms. PAGE. That might well have had an impact, although the administrator would have had to be committed to action in a particular area.

In fact, we asked a contractor to take a look at the rulemaking process in the FAA and what some of the considerations were for our report. He said that one part of the process for the FAA that had a substantial slowing effect was the need to clear each of the regulations or to work within the framework of the DOT itself.

Senator FORD. So you are saying that the DOT, as a result of being a department and this being an agency, having to be cleared up the ladder, has restricted the ability to move forward for new regulations?

Ms. PAGE. It was an active inhibiting factor.

Senator FORD. So that is an inhibiting factor. And secondly, we lose administrators about every two years and a new one comes in with a different idea and a different approach. Mr. McArtor has eight points he would like to try to improve or do while he is there. The Administrator serving before him I thought was an excellent individual, but he had problems getting anything done and getting them implemented.

Would an independent FAA, with a seven year term for the Director, or ten, do you think maybe improve because then they would know that they would be there a while and they could go ahead and work and they would have the funding and to move forward?

I want to lay that out a little bit, and I would like to put the bait out there and see if you want to come forward with it.

Ms. PAGE. If I may be allowed to take off my OTA hat.

Senator FORD. That would be fine.

Ms. PAGE. As an observer of the Federal processes and numerous reorganizations, both within DOT and other agencies, I would say that I think reorganizations and creating independent agencies, like everything else, has its up side and its down side.

Generally speaking, reorganizations are effective for two to three years in shaking things up considerably and perhaps addressing some of the issues that were of major concern at the time the reorganization was put in place. They are very large-scale events. They have major impact on staff and on the way the agency does business, and it takes them a while to recover from that.

They do have a certain forward momentum to get at the issues that were contentious beforehand, and that carries them through three, maybe four to five years. Then new problems set in, the ones we were never able to quite see or foresee as a result of the way the agency was restructured.

I think this is endemic to bureaucratic organizations.

Senator FORD. I am not sure we are talking about restructuring of the agency, but we are trying to make it independent, and under its independence one of the things I found that Administrator McArtor has done is to promote within the agency one of the regional directors, which I am very pleased with.

He came in, he kept his status, but then he became one of the important individuals in the administrator's office. And I think that gave those out in the regional areas some feeling that there was somebody up there that knew their problems and could talk to the director. But that director is only going to be there another 15 months, and probably he will be gone.

What I am trying to do is to find an individual, make the agency independent, let them do the things. And we have over 20 co-sponsors on a bill to establish an independent FAA. The minority whip has just come on as a co-sponsor of an independent FAA.

So I am very pleased with the non-partisan approach and support that we have been able to receive for this legislation.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Ms. Page. You could change my mind. I had not come on with respect to the independent agency because I felt that it is important that the aviation and particularly aviation safety had a word at the cabinet table.

But maybe we will have to forego that—they are not doing much at the cabinet table anyway—and get one with some continuity. So if you can emphasize one way or the other your findings in this OTA study along this line, it would be very helpful to all of us here in the Senate.

Ms. PAGE. Senator, may I say one more thing, or perhaps two more comments, actually. I think continuity of a director for the FAA is a very important thing, and I think that bringing in representatives from the field offices of the regions is extremely important.

We found in our trips to the regions that the problems that were identified several years ago, of the regions taking independent action and having different standards, have continued despite the fact that this has been highlighted as an issue for the administrator.

The responses to our surveys tell us the same thing from the airlines' perspective. Those problems have been well aired, and it is important to take some action that will really address then, and make sure that there are consistent activities by the FAA so that we do not have a western region approach or a southeast region approach.

The second point—and it is a negative one for the establishment of a separate agency—is that if we are going to resolve some of these problems that have occurred because we have made air travel into mass transportation, we are going to have to look at a transportation system whose parts function together.

That is, we cannot carry all the people who want to travel quickly between New York and Washington in airplanes. And if the solution to some of our airport problems is larger regional airports built where the land space is available to build them, outside these major urban centers, then we are going to have to have transportation from those airports to those major urban centers.

That is why people travel, to get between big cities, usually, or that is why the largest body of people travel.

Senator FORD. That does not have anything to do with an independent FAA, though.

Ms. PAGE. The purpose in setting up DOT and making the FAA a part of it, was, in theory, to make the different transportation-related agencies work together. We all know that that does not happen with the frequency that it ought to.

And I guess my fear—and again, I am speaking without my OTA hat on, although we will address this in the report, my fear is that by removing FAA from DOT we would exacerbate what is already poor and inadequate communication and interaction between the DOT agencies.

Senator FORD. That is fine. But you just stated that the administrator of FAA was inhibited from getting things done because he had to get it through DOT. And so when we get all of that up through there, then OMB factors in and we find a trust fund that is there just primarily or only for airport improvement, F&E and other items, and yet we are restrained in spending that because it is counted as it relates to the budget.

So we find we are being restrained both ways, and it seems to me that if you want an administrator to do something, he has to know or she has to know that they are going to be, as long as they do a good job, they are going to stay there for seven years, and you go ahead and pursue these things.

We did not have the engineers for the new technology as they relate to the NAS plan. You know, those things all kind of floundered. That is one reason we did not hire controllers, because we were going to get this new technology.

Well, the technology was not ready. Finally, we had to bring on a management team to put it together so we could move forward. And if we wait for state of the art technology, we will never buy anything. So we have to buy technology that can be added onto.

Is my time up, Mr. Chairman?

The CHAIRMAN. This is an important subject.

Senator FORD. You see, there are several things that I can see that, if you are going to pursue it and if you have good oversight, things are going to happen. And if you organize it and make it independent and forget it, then it is going to do exactly what you say: Three to five years out there, it is going to be floundering.

Well, three to five years from now we will have a different type of communications and different type of airplanes and different type of qualification for pilots, all of that. We have to stay on top of it. We have to be ahead of the curve instead of so far behind it.

At least I have got your head going up and down.

The CHAIRMAN. Ms. Page, with respect to just that, what Senator Ford was emphasizing, look at it, because I have got an open mind and I am trying to learn. And I have different reactions to it, and we would like to know what you folks find in that particular study.

In that study, with respect to emphasis, let us emphasize safety for OTA here, because I know it is nice to come in and talk about the statistics and the lack of fatalities, up until last weekend, at least. But it is much like the nuclear arms issue. If we looked at the fatalities, it would be just a wonderful thing and they all ought to celebrate, but we know it is the most dangerous.

And similarly here, as this mass transit in the air develops, with the lack of pilots and the lack of training and the lack of capability on that, I would not contest my pilot friend Senator McCain, but I do not care about a fellow having 12,000 hours in the military. I have seen a lot of them.

I would rather have one that has 2,000 hours on my little Cessna, that I have to hop and jump around on, because that 2,000 hour pilot on the small plane knows not to go into that thunderhead. That 12,000 hour military pilot goes barreling right on in. He thinks he is going to be electronically controlled, computer controlled, and he can get right on through, and he is just reading his book as it goes right on through, and I am upside-down. I have had those pilots before.

You have got to have the particular pilot on the particular plane, because they learn after 12,000 hours.

I am at a MAC air base, John. We have got C-5A, 141 pilots, and they really get spoiled. They have got to get back into that small plane and find out how to really fly it.

On the capacity edge, with the lack of runways, with the lack of controllers and the lack of maintenance and the lack of standards that are set up and various other things, you see, you have got a study coming next year and we have got another commission coming in next year. And the reason we started, like you say, the regulatory process, the Senators are complaining, takes three to five years.

I am not waiting for three to five months until next April to find out what is obvious. And it is coming in, crunching in on us, and we see it.

Could it be, for example, there in Denver with, they say, some kind of slat out on this DC-9, that a pilot with thousands of hours was never told about this particular DC-9 not having the slats and therefore not being as able to stabilize it, as capable of stabilizing it, you might say? Or with respect to ice or whatever it is, I do not know and I am not jumping to conclusions.

But let us give the emphasis on safety, rather than trying to give Alfred Kahn the good government award.

That is what got us into this hub thing, you know. We are all jammed in and it looks good on paper, but it is chaos and it is unsafe.

You say the Federal Government, we do not have a program to analyze and understand the impact of the stresses on pilots' performance. Could you add that to your study?

Ms. PAGE. It is already there. We had——

The CHAIRMAN. You will be studying that?

Ms. PAGE. Yes, we have and we are. We had a workshop on human factors in aviation, for which we pulled together a number of experts from the research community, and from NASA-Ames, where the human factors center is.

And we included representatives of the different FAA programs that have responsibility for dealing with human factors. We will be working together to develop specific policy options related to the issues that have to do with human beings. Although some of the manufacturers tell us that we will have a day when will we have the potential for flying a commercial plane without a pilot, we are all in agreement that that is not going to happen very soon. We need to work very hard on that most essential part of the safety system, human beings.

The title of the report is "Aviation Safety in a Competitive Environment." Rest assured we are not going to forget safety.

The CHAIRMAN. Well, that is good, because even now I wonder about the response of the FAA. We have had pilots come in and attest to the sacrificing of safety for profit. On the railroad side, Senator Exon has Riley over there as the Federal Railroad Administrator, immediately moves in and he has a safety assessment, because we have had similar testimony in rail transportation.

McArtor has moved in. He just said he had admonished them, they have got to be more safe. Well, heck, everybody knows that.

And there ought to be a formal kind of review to verify safety, because we have had the head of the Air Line Pilots Association, not from a single airline—I have got some other airlines, too, ready to testify. But the chief of the pilots has come up and said this is not untypical.

We thank you very much for this preliminary overview.

And John, I knew you were a carrier pilot and you know how to land upside-down. But I can tell you now, those big old MAC boys, they still think they have got a big truck and they can come in and do anything electronically or whatever it is.

But thank you very, very much, Ms. Page.

[The statement and questions follow:]

STATEMENT OF EDITH B. PAGE, PROJECT DIRECTOR, OFFICE OF TECHNOLOGY ASSESSMENT

AVIATION SAFETY IN A COMPETITIVE ENVIRONMENT

Thank you, Mr. Chairman and good morning. It is a pleasure to testify today before the Committee on one of today's most hotly contested subjects—the safety and convenience of flying in deregulated skies. About a year ago, the Office of Technology Assessment was asked to undertake a study of Aviation and Motor Carrier Safety in a Competitive Environment. We have completed much of our research and are well into our analysis. I am happy to share some of our preliminary conclusions with the Committee today.

First, let me say flatly that the data, as they are currently kept and interpreted, show no diminution of the splendid safety record of American carriers. Moreover, as Mr. Kahn so colorfully related at your last hearing on this subject, many goals of economic deregulation have been fulfilled with glorious success. More people are traveling to more places at even lower prices than predicted. Airplane travel has become mass transit—along with all the positive and negative features that accompany moving lots of human bodies around in large metal containers.

I also agree with Mr. Kahn that the government has not adequately accomplished many of the controls and programs, such as hiring more air traffic controllers and beefing up inspection programs, that he and his colleagues warned would be necessary. The Congress has already played a major role in forcing DOT to take action on these issues and on consumer problems such as schedule delays and lost baggage. However, other, less visible consequences of the tremendous changes in airline organizations and operations that have occurred will require new approaches by both the Federal Government and industry.

The Federal Role

First, let's look at the Federal responsibilities. The need for more controllers and inspectors, for better training and working conditions, for consistent enforcement, and more realistic scheduling to avoid delays have been thoroughly discussed. OTA's close look at FAA data has reemphasized the tremendous importance of these aspects of the Federal responsibility for safety. As shown in Figure 1, total takeoffs and landings at towered airports are lower today than they were in 1978 when economic deregulation occurred. However, commercial operations have increased from 13 million to 19 million. It is not an increase in the number of general aviation or military flights that is putting such stress on our airspace and airports, it is more trips by Ms. and Mr. American Flyer—and the Federal Government has direct responsibility for their safety through regulation and the air traffic control system.

Busy airports are heavily utilized primarily because they are located in large urban areas that generate a lot of travel. However, to capture market share to smaller cities, large carriers that hitherto operated primarily point to point have not almost universally adopted hub and spoke operations. Thus, airports at our biggest population centers have become hubs in addition to being major origin and destination points. Several airports already operate at over 100 percent of designated capacity during peak hours, and even airspace is at a premium around the most bustling activity centers. Sheer traffic volume and the airlines' desire to retain advantageous computerized reservation listings lead to scheduling many flights close together. Delays are thus inevitable, especially during bad weather. Only some of these bunching delays can be ameliorated by legislation recently passed by Congress and DOT's requirement to report monthly delays.

Airspace and Airport Capacity Constraints

A recent study by DOT evaluates the impact on airport capacity if new runways are built at nine busy airports and if improved technologies and procedures are implemented. According to the study, even if these improvements are put in place as quickly as possible, our system still will not be able to offset safely even half of the delays associated with increases in air travel expected by 1994.

Unfortunately, the peak capacity of our airspace and airports is the safety constraint that is the hardest to develop countermeasures for. Institutional issues, such as land use and acquisition decisions, environmental impact assessments and noise relief, are sufficiently difficult that we are not going to be able to build new airports or expand existing ones quickly. The processes are extraordinarily time consuming and contentious. Moreover, obviously we cannot create more airspace, although we can achieve some productivity improvements through rearrangements such as the East Coast plan and advances in technologies. More runways will help—but not enough. Improved air traffic control and landing technologies will help—but not enough. The safety problem is the existence of bunched demand that puts pressure on capacity limits. This problem could be addressed by reducing bunched demand: by requiring larger planes at peak hours, or by allowing only large planes at peak hours, by rationing of slots, by mandatory reduction of flights in bad weather to match the actual reduction in capacity, or by prohibition of hubbing during peaks, just to mention some approaches. However there will be political and economic consequences of any of these measures to improve safety—including unanticipated, negative consequences.

Some economists have said that peak hour pricing—charging more for landing slots at peak travel times at the busiest airports—is the way to handle capacity problems. OTA's study indicates that this or any alternative method of capacity management needs to be thought through very carefully and subjected to rigorous public debate before adoption by the Congress. Money used by an airline to pay for an expensive and desirable landing slot is unavailable to be used for pilot training or enhancing maintenance practices. Airlines providing service to small communities may not be able to afford landing fees at a busy hub that is a major connection point for its regular customers. Furthermore, any changes will have impacts, which must be carefully weighed, on other parts of the system.

We know, for example, that delays at New York airports have been reduced because of the East Coast plan. However, according to the Air Transport Association, congestion in the Philadelphia area has been exacerbated, both because of hubbing by major airlines and airspace congestion from flight path rearrangements, made under the plan to alleviate delays in Washington and New York. As additional evidence, OTA has learned from a small commuter airline that it has had to reduce what used to be 10 daily round trip flights from small Pennsylvania cities to Philadelphia to 8, because it simply cannot keep to schedule otherwise. In bad weather, when planes must fly under instrument flight rules, delays are so severe that the company has to cancel one or more of its afternoon flights so that the next flight will be only an hour or an hour and a half late. The communities the company serves are close enough to Philadelphia that driving is an acceptable alternative if regular convenient air service is unavailable. The airline is well aware of this, and its business has already suffered substantially because of the imposed reductions in its flights.

We also know that Logan airport in Boston is considering using peak hour landing fees that will be high enough to price most commuter flights with fewer than 30 seats out of the market. If the plan goes ahead, it will be the smaller, relatively close-by communities that will lose air service connections.

An economist we were describing this situation to commented that perhaps the automobile was the most efficient mode of transport for trips to the airport under these circumstances. He went on to say, however, that decisions about how to handle access problems, such as the one faced by the Pennsylvania airline and small airlines using Logan, have far-reaching economic consequences. For this reason, comprehensive analysis of safety needs and economic effects by the FAA and a thorough public airing and discussion in the Congress of the issues should precede any decisions on airport or airspace allocations to minimize negative consequences.

Safety Indicators

We are all familiar with the increases in near mid-air collisions (NMACs). OTA has analyzed the FAA data on near mid-air collisions, and we discovered that the number of NMACs involving at least one air carrier tracks closely the number of tower operations for commercial aircraft. (See Figure 2.) As commercial tower operations have increased annually since 1982, NMACs have faithfully tracked the increases. This is perfectly reasonable, after all; if you put more commercial flights into a constant amount of air-space, the chances of aircraft coming close enough together to create a NMAC are greater. We suspect that the number of NMACs will continue to increase as commercial air travel increases. How much of a safety concern is this? The numbers indicate a possible large increase in the exposure to risk of mid-air collisions for travelers. Accident statistics show that mid-air collisions now account for about 1 percent of commercial accidents (slightly below this for Part 121 carriers and slightly higher for commuters and air taxis). However, increases in traffic pressure will make it critical to keep the rest of the system functioning at a sufficiently safe level so the NMACs don't become collisions.

An important message about the future Federal role that I'd like to leave with you today is that more travelers mean more flights and more congestion, and may mean an increased exposure to risk. However, the technical and increased runway construction options for handling increased traffic are very limited. Thus, Congress may want to consider additional means of limiting peak air traffic to keep the exposure as low as it has been for the past few years and thus continue to take a high level of responsibility for safety. The economic consequences of available choices—the equity issues for smaller communities, the concept of equal access to public facilities—are extraordinarily important issues that Congress will want to consider fully.

Industry's Changes

We have learned that industry, too, faces unexpected needs to adjust to changes in the ways they do business after economic deregulation. OTA sent questionnaires to the airlines asking about changes in safety-related programs since deregulation, and has sent similar questionnaires to pilots and mechanics groups. The responses demonstrate that with time-honored American independence of spirit and approach, each company has coped with the need to operate at lower costs in very different ways.

Some airlines have reduced or eliminated engineering and or meteorological sections, arranging with the manufacturer to provide some substitute engineering capabilities and with outside resources for weather information. OTA has every reason to believe that the manufacturers provide excellent engineering advice, but the elimination of airline engineering expertise means that one of the many safety redundancies has been eliminated. The poor quality of available weather information was a source of numerous comments by pilots, and many airlines do not seem to have found a good way to communicate weather information or to train pilots thoroughly on how to deal with weather problems. Some airlines have always had this deficiency; for others it is a result of cutbacks.

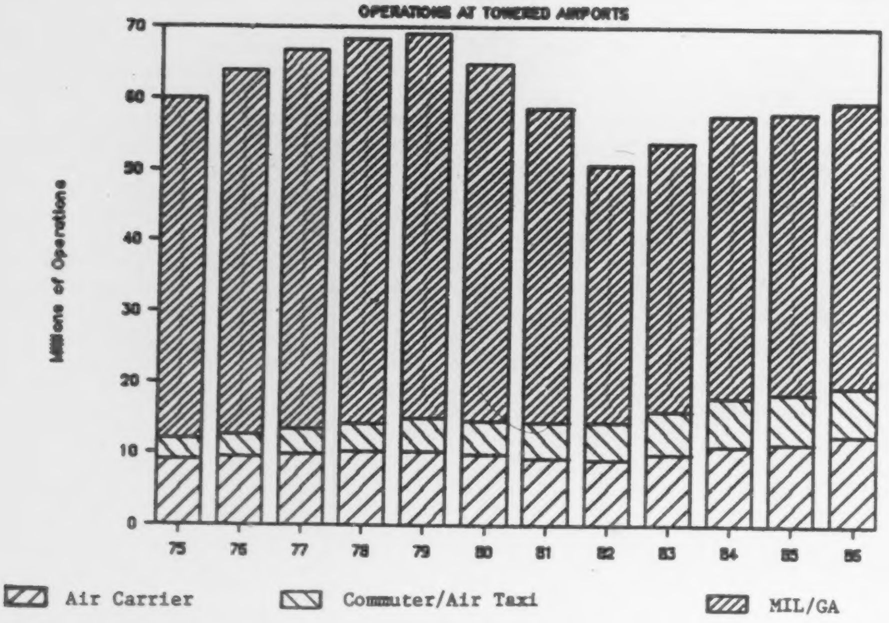
The increase in hub and spoke operations has meant a redeployment of maintenance personnel or greater use of contract maintenance. Maintenance workers have complained of economic and personal hardship because of the need to change locations. Pilots have complained about the propensity to delay repairs because maintenance personnel at the spoke locations do not have parts or expertise to complete the job. It is impossible for OTA to quantify the impact on safety of these changes in practice, because the data are not kept in a way that permits examination of comparable figures. The best we can do is to state that these changes are increasing stress on the humans who are so important a part of our safety system.

This brings me to the final and most critical part of our safety system—the people. Safety data show that human error is involved in well over half of all air accidents. People under constant stress may perform below peak capability, especially when conditions are less than optimum throughout the air safety system. The answers to our questionnaires tell us that with some exceptions, both pilots and mechanics are under severe stress for reasons ranging from pay levels and poor communications with management to distress at what they view as a much reduced commitment to safety on the part of management. It is a tribute to their professionalism that airline personnel have continued to perform so well under this sort of stress. Federal programs to analyze and understand the impact of these types of stresses on pilot performance have languished for several years. Attendees at an OTA workshop on human factors were unanimous in saying that funding and implementation of research into human factors is of vital importance to safety. The Federal Government has not yet recognized or utilized what is known about human performance to develop countermeasures or regulatory requirements.

The issues of the adequacy of training and level of experience are closely related to the quality of human performance under stress. This area is the least tractable of the human factors issues. Projections tell us that the shortage of trained and experienced pilots and mechanics is going to get much worse before it gets better. The pool of young people who would be expected to move into flying is shrinking annually and competition from other professions is keen. Some small commuter airlines have told OTA that they are experiencing close to 100 percent pilot turnover annually. Their trained pilots are hired away by a larger airline almost the minute they acquire the necessary hours. This has put unbearable strains on small airline training programs and lowered the experience level of pilots flying those smaller planes, and it is a major source of worry for executives of commuter lines. At least two of the major airlines, Northwest and Eastern, have begun to work with universities and colleges to develop pilot education programs. The Federal government might want to take an active role in encouraging and assisting other educational institutions to help develop a working professional pipeline to assure a supply of trained personnel for the country's air system.

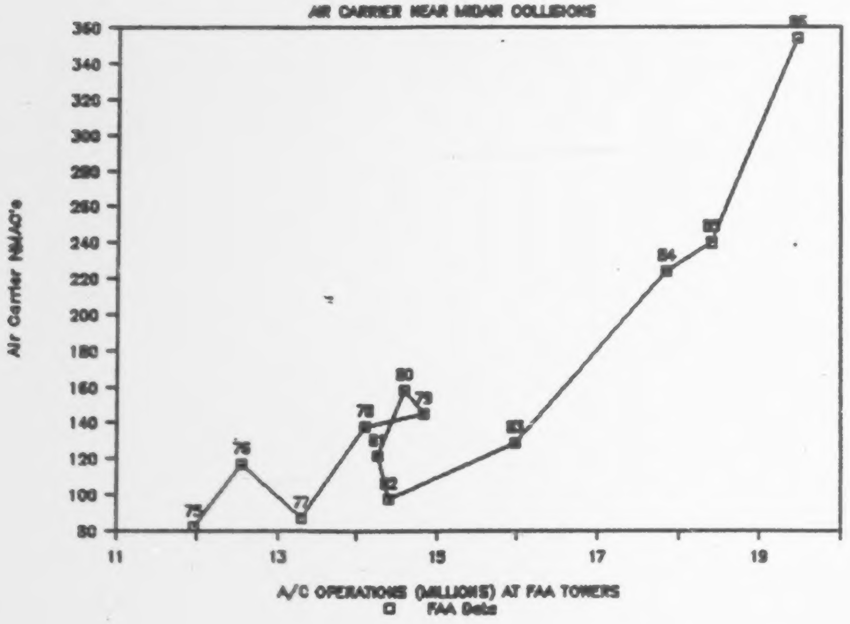
Mr. Chairman, I have tried to lay out the most difficult issues that OTA has found have resulted from the otherwise happy consequences of economic deregulation—that more people can afford to fly more often. Our research has shown that there are distress signals in the system, although the data as currently kept do not reflect them I have identified some of those today and look forward to working with the Committee as it turns its attention to them. Thank you, I would be happy to answer questions.

FIGURE 1



Source: Office of Technology Assessment.

FIGURE 2



Source: Office of Technology Assessment.

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Congress of the United States
OFFICE OF TECHNOLOGY ASSESSMENT
WASHINGTON, DC 20510-8025

December 7, 1987

The Honorable Ernest F. Hollings
Chairman
Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510-6125

Dear Mr. Chairman:

I am pleased to respond to the questions you posed as follow-up to the OTA testimony before the Commerce Committee on airline safety. Although full response to some of the questions must await completion of OTA's report next spring, each of the questions is addressed in the enclosure.

This is a challenging study, and it examines a number of extremely important public issues. It is a pleasure to work with the Committee toward policies that can help to ensure safer transportation.

Sincerely,

Edith B. Page

Edith B. Page
Project Director

Enclosure

EMPLOYEE STRESS

1. In your statement, you refer to the fact that your study has indicated that both pilots and mechanics are under severe stress, which may result in diminished safety. Are you finding that the cause of this stress is simply a labor-management problem, or are employees being pushed beyond their limits?

Response to Question 1:

The causes of employee stress include both labor-management problems and occasions when employees are being pushed beyond their physical limits. The degree of stress varies with individual airlines, and in a few airlines undergoing major management changes, very high personnel stress levels have been reported. Numerous reasons, only some related to salary levels, are cited by pilots and mechanics for the stress they feel. The reasons range from feelings that management ranks maintenance secondary to avoiding delays, through having flights extend over legal duty hours without proper arrangements for relief, to having decisions made by the company that contravene a pilot's professional judgment. In the final report, OTA will examine the causes of stress in greater detail and outline steps some airlines have found effective in alleviating stress during difficult periods.

2. You also mentioned that Federal programs to analyze the impact of these stresses on pilot performance have languished for several years. What programs are there? Are they being underfunded or simply underutilized?

Response to Question 2:

During 1983 and 1984, the FAA developed a plan for a human factors research program. Released in January 1985 as the "Cockpit Human Factors Research Plan," the program was never implemented; other programs and projects were given higher priority. Five research areas were identified, including advanced cockpit technology, pilot error, rotorcraft issues, crew training, and regulatory activities. The research might not have dealt directly with stress, but would have cast light on elements of the crew environment that can exacerbate stress.

AIRPORT CAPACITY

3. You stated, as have many others, that several airports are currently operating above 100 percent capacity during peak hours. In your view, is this a safety problem? Are there too many flights operating throughout the system?

Response to Question 3:

On a nationwide basis, the system has room for all the flights operating in it. However, in good weather, general aviation planes flying outside the airspace of the busier airports need not be under air traffic control; and in certain heavily used airspace, such as the Los Angeles basin, new procedures may be needed to keep so many flights from operating at times of severe congestion.

The FAA relies, for air traffic management, on Central Flow Control to limit traffic flows to airports when weather conditions deteriorate or traffic levels are too high. Standards exist for separation distances between aircraft during all parts of the operating cycle, and these are used to determine capacity for individual airports in both good and bad weather, based on the number and configuration of runways. The FAA Flow Control Center limits traffic flow to airports during bad weather or when traffic levels are too high, by keeping planes on the ground. Controllers in airport towers and en-route centers are responsible for helping pilots maintain separation standards. In theory, this minimizes the possibility of safety problems although delays are a certainty.

In practice, the airlines' schedules at the busiest airports are set by a difficult, group-negotiating process involving DOT and the airlines. OTA will examine these difficult issues more thoroughly and provide policy options for congressional consideration in the final report.

4. You have stated that Congress may have to impose measures designed to handle increased traffic. In your view, why hasn't the FAA done this?

Response to Question 4:

Measures to handle substantially increased airport demand are not feasible to implement in the short term. OTA has found that some form of demand management will probably be necessary at some airports at some times. The FAA has not done this because the choices that would allow this are difficult and controversial; DOT has chosen to rely on conferences with the airlines to arrive at present allocations. Alternative methods will require technically sound standards (which now do not exist) by which to manage demand and perhaps some kind of Federal demand regulation. The latter action would have far reaching economic consequences, will be highly controversial, and will require extensive public debate to ensure equity. These issues will be explored more fully in the OTA report.

AIRLINE OPERATIONS

5. Your statement touched on the increasing trend where, since deregulation, some airlines have reduced or eliminated engineering or weather forecasting departments. Is this a problem that needs to be reversed by the FAA?

Response to Question 5:

The reduction or elimination of airline engineering departments is compensated for to a certain extent by the manufacturer's engineering expertise. This is too new a development for OTA to evaluate in terms of impact on safety, but it is one the FAA will want to monitor closely.

Responses to OTA's industry questionnaire indicate that the issues of how weather information is provided to pilots, and of training pilots to deal with different kinds of severe weather conditions, are immediate concerns and warrant corrective action by the FAA.

HUB AIRPORTS

6. Do you believe that the proliferation of hub airports has hurt the margin of aviation safety? If so, what can we do to minimize those problems?

Response to Question 6

In itself, the proliferation of hub airports does not have an adverse impact on safety. To the extent that this practice increases congestion, however, it would seem prudent to see that other parts of the safety system, such as the number of air traffic controllers and the capabilities of the air traffic control equipment at these hubs, are improved. Certain very busy airports have had trouble attracting controllers to reach full manpower levels. Furthermore, several of these airports were already heavily used as origin and destination points, and their peak hour capacity problems have been exacerbated by these hubbing operations. The issue of capacity and its relationship to safety is discussed in the answer to question 3, above.

The CHAIRMAN. Our first panel of witnesses will be Colonel Frank Borman, Vice Chairman of Texas Air, and Mr. Edward Beauvals, Chairman and Chief Executive Officer of America West, and Mr. Clark Onstad, Vice President of Texas Air.

Frank, you brought your lawyer with you, is that right?

STATEMENT OF COL. FRANK BORMAN, VICE CHAIRMAN, TEXAS AIR, ACCOMPANIED BY CLARK ONSTAD, VICE PRESIDENT

Colonel BORMAN. I am, as you know, pinch hitting for Frank Lorenzo, who has been in Denver since the accident. And I have not had anything to do with the testimony that was submitted. If there are any questions on that, Mr. Onstad can answer them.

I have my own thoughts that are mine and do not necessarily coincide with the testimony.

The CHAIRMAN. Well, let us have your own thoughts, because we have a tremendous respect for you here in the Congress. You are an American hero, and of course I am an old-time friend, just to be candid with you, of Eastern Air. I served up here in Washington on the Hoover Commission with Captain Eddie Rickenbacker, and that was 34 years ago, when we investigated the intelligence activities.

And Eastern Air has been the primary carrier in my backyard. Now I need an intelligence agent to find them.

I hate to see that happen, and we are going down, down, down. In fact, I do not know how that crowd got you back in.

So tell us about it, because there you have got an airline that was the best and, then last year was hit by the FAA with 78,000 violations. You paid a $9.5 million fine for that.

Colonel **Borman**. May I say one thing? That happened on my watch and that is one thing I totally disagree with Texas Air. I can assure you, I would have never paid that fine without litigation, without it being discussed in the courts, had I remained as the head of Eastern Airlines.

If you take any kind of close examination—and we are getting off the track right off the bat here.

The **Chairman**. No, this is on the track. I want to know about maintenance.

Colonel **Borman**. You would not find that there were maintenance errors or procedural errors in the FAA's mind. But to me that was basically a DOT mandate, where everyone decided we are going to get tough and have white gloves.

While I was at Eastern the last ten years, when I was responsible for Eastern Airlines as CEO, to this day we have carried over half a billion people, with one fatal accident. In that entire time period, I am not aware of one accident that caused injury or fatality because of a maintenance malfunction or a maintenance shortage.

The **Chairman**. But you are getting down to the tail end of the line, that is the point of the FAA inspection.

Colonel **Borman**. That happened before Texas Air came in, though, is my point.

But may I go ahead, sir?

The **Chairman**. Sure.

Colonel **Borman**. Since I left two years ago, I have been out in New Mexico and I have been involved really in writing and thinking, and started flying again. And so I have a different perspective, I think, perhaps than I had when I was on the firing line.

One of the things that is clear to me, even though I opposed it dramatically, was that deregulation works. The GAO says passengers are saving $6 billion, $6 billion a year in travel costs, that tickets would be 40 percent more expensive if it were not deregulated.

Perhaps most telling is that 25 percent of the populace had flown ten years ago and today 72 percent of all Americans have flown. We have taken air transportation from the elitists and made it mass transportation. We are the only society that has done that.

Now, along the way there have been problems—the hub and spoke system that you referred to in Atlanta. But the airlines did not go into the hub and spoke system because it somehow was magic and increased profit. The hub and spoke system enormously magnified the service available.

I just picked a city at random, Charleston, South Carolina.

You can go from Charleston to Des Moines three times a day; to Wichita, Kansas, twice; to Albuquerque once. You could not do that without a hub and spoke system. And so the hub and spoke——

The **Chairman**. Why could you not do that? I did it before.

Colonel **Borman**. Well, because, sir, you simply would not have that kind of choice unless you took people—because there is not the loads to go from Charleston to Des Moines daily three times on one airplane.

The **Chairman**. We had the loads to go from Charleston to Washington, since you chose it. We had three flights up when I got elected in 1966 and three flights back direct. And now I go out to Baltimore.

Colonel BORMAN. In the major population centers like Washington——

The CHAIRMAN. What is your answer to that? I have lost my service. And I want to tell you, my price has gone up, quadrupled. I do not know where you get those other statistics, but I travel.

Colonel BORMAN. They came from the GAO, sir.

The CHAIRMAN. Well, that crowd does not know what they are doing.

I can go to the next counter and get to Miami at half the price, an hour and a half quicker. And it is 500 to 600 miles farther. So do not tell me about my service increased and my price has decreased and all of America is traveling.

I have more frequent flyer tabs than you have on Eastern right now, I bet you.

Colonel BORMAN. Well, I would suggest to you, sir, that really service has improved. The hub and spokes are from the standpoint of an airline—and again, I am speaking for myself and not for anybody else—are expensive. They are nonproductive from the standpoint of the labor force, because you have people working intensely and then sitting around.

But they do provide for the average passenger. And now, as I have said, there are millions of Americans flying that never flew before.

And there is no question about it, they degrade the nonstop service that was in place. But overall, the vast majority of the people I think have had their travel arrangements improved, and the prices have gone down. Now, it is clear they have gone up in some individual areas, and if you are honest about it and look at it, when the airlines were regulated the people that flew between New York and Miami were subsidizing the people that flew on the smaller routes.

Now that process has been reversed, or at least changed. But I think that the free market has worked.

The CHAIRMAN. But that process is now where 85 percent of all the communities in America are subsidizing just that, New York to Miami, and the Charleston to Las Vegas, as you point out, the long hauls. And the service is gone.

So what we had—and it was well accepted and it worked extremely well—has now turned tail and we are all suffering. And in fact, people from the medium sized towns—it really costs so much, let us say, to go from Columbia up to Charlotte to catch the plane, that they are just driving a car.

Colonel BORMAN. Let me say one other thing, too, about the delays that we have seen come in. I do not have any numbers on this. I do not have any organization to provide it. But you may recall the delays that we encountered prior to the PATCO strike, with the numerous slowdowns.

And it would be interesting for someone to look at the arrival performance of the airlines before the strike and the arrival performance today. I do not know what it is and I may be totally wrong, but I can tell you this: We estimated then that the delays encountered by cause of the slowdowns in the controllers were costing Eastern $60 million a year.

So I think that the process is working. The arrival times are up. I think the top arrival time was around 85 percent, 85 percent of the flights within 15 minutes, which is a pretty significant improvement.

But let me go on, because I think that there are clear signs that we need—we need more controllers, we need more airports. And I would remind you to suggest that somehow politically we cannot do it flies in the face of the Japanese experience, where they have been able to build new airports under difficult times.

But nevertheless, if we simply say that politically we cannot do something, I think we need to examine the whole structure of our society, if it is indeed desirable for most of the people.

And I think clearly that we need to look at not just the airlines, but all facets of the aviation industry. I am worried about general aviation. I own a little airplane now and I can tell you now as I go around to different airports that people who used to be out, the young kids who used to be out gassing the airplanes, are not there. They are all old people like me now.

We have priced general aviation out of the reach of most youngsters. As the volume has gone, the fixed base operators have taken enormous increases in fuel costs. The parts supplies have gone up enormously. Airplanes, there is not a two-place commercial trainer made in this country today, there is not one.

I tried to get somebody interested in starting one again, but when he looked at the liability or potential liability from the insurance problems, he just could not afford it. He estimated it would cost him $80,000 a unit just to protect against liability claims.

So we have got to do something, in my estimation, to revitalize general aviation, and I suggest that is high on the list because that is where the pilots are going to come from.

I strongly believe we should make the FAA an independent agency, as it once was. And I support the FAA Administrator being in place for seven years. In the 17 years that I was at Eastern, we went through innumerable FAA Administrators, and then at the end innumerable Secretaries of Transportation, most of whom in the Secretary of Transportation area had absolutely no knowledge of aviation.

Now, every person in their own industry feels it is the most important, but aviation is indeed demanding and it can be extremely dangerous, and you need to have professionals, in my estimation. And I think that the professional should be a seven year FAA Administrator.

The other area of the business that brought me the most frustration in the seven years I was there, of course, as we have gone through this change, has been the area of trying to convince the labor force that the system works and that the marketplace is king.

One of the great frustrations of that and I think one of the frustrations that brings in potential for stress and decrease in safety is the Railway Labor Act that was passed, what, 50 years ago, when not only the airlines were fledglings, but the railroads were completely classified as utilities.

Today you either need to scrap that or to fix it so that when the contract is up the parties are free to go their own way. United settled a tentative settlement two days ago of a contract that had been open for over a year, all that year. Northwest is going through the same problem now. And we simply need to make certain that we recognize that the airlines today are competitive businesses and that labor is indeed free to negotiate and take whatever action they need to, but it will not affect the whole transportation system of the country.

All in all—if I may, one other aside. You got into the DC-9 accident in Denver and again I do not know anything about it except what I read in the paper. But I know at Eastern a pilot who checks out as captain not only goes through a whole program and simulator program, but then has 25 hours of supervisory riding with an experienced captain sitting right beside him.

And I suspect that is what happened here. And I would suggest to you that simulators today have replaced the airplane as such, and I strongly support that as a training device. It is far better than an airplane. I would much rather have a person with a good simulator program flying as captain than somebody who had more hours in the same type of airplane.

And that is it, sir.

[The statement follows:]

STATEMENT OF FRANK LORENZO, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, TEXAS AIR CORPORATION

Good morning Mr. Chairman and members of the committee.

Thank you for the opportunity to appear before you this morning to discuss the deregulation of the airline industry and the proper role of the Federal Government in our now deregulated environment. As we all are well aware, the U.S. air transportation industry has undergone dramatic change over the last decade. In fact, I am hardpressed to think of any other major U.S. Industry where the Governing rules have been changed as substantially as in the airline industry.

I have had the privilege of being a participant in and first-hand witness to that change. I started my airline career in 1969 and my formative years as an airline manager were spent in the highly regulated economic environment over which the then Civil Aeronautics Board presided. I participated in the airline deregulation debate. When airline deregulation was launched in 1978, I had the challenge of restructuring an airline—Texas International Airlines—to ensure that it would survive and prosper in a competitive marketplace. And now, with the airline industry having adjusted to deregulation, I oversee airlines which, in the aggregate, operate over 600 airplanes and employ over 70,000 persons.

I testify here today as the chief executive officer of a publicly held corporation, Texas Air Corporation. In that capacity, I view my primary responsibility, consistent with the legal obligations with which I and my company are charged, to be to the stockholders of Texas Air. That is a fundamental principle of our free enterprise system. But let me be clear what that means. It means that the airlines of Texas Air have to be operated in as safe a manner as possible. It means never concluding that airline operations are "safe enough" but to strive constantly through better training, management and equipment to increase the margin of safety. It also means being responsive to consumer demands; to operate on time; to handle baggage properly; to offer fairly priced quality air service to a wide variety of destinations. And, it means providing a forward-looking work environment, which at Continental includes participative management, profit sharing and "gain sharing" under which gains made through cost savings and similar techinques are shared by the company and its employees. This is our formula at Texas Air for achieving success and all of our employees are dedicated to it.

To place in perspective the question that is before us today, i.e., the proper role of the Federal Government, I think it helpful to revisit the time when the airline deregulation experiment was launched. In 1978, I was the president of Texas International Airlines, a small, local airline based in Dallas, Texas. Of the 19 airlines that operated more than 1 billion revenue passenger miles that year, Texas International ranked 16th. We were smaller than such airlines as North Central, Hughes, National, Braniff and Western. The industry's giants—United, American, TWA—were 20 to 30 times Texas International's size.

Back then, I was an opponent of airline deregulation. My principal concern was that smaller carriers such as Texas International could not survive in a deregulated environment. From my perspective, I did not see a level playing field. Rather, I saw the larger carriers such as United and American having inherent structural advantages that could not be overcome by smaller airlines no matter how hard they tried. With the benefit of having acquired routes, planes, and market identity in a regulated environment, the large carriers were in the position to use these advantages in a deregulated environment to keep smaller competitors from expanding.

In hindsight, I believe that the Congress made the right choice in deregulating the airline industry. Overall, the U.S. consumer has received tremendous benefits as a result of deregulation. Air service options have multiplied. As the Nation's major airline systems have expanded and encroached on each other's markets, travelers have gained valuable airline and flight alternatives. By fostering increased competition, deregulation also has brought air fares down. Ten years ago, 39 percent of passengers moved on discount fares; now almost 90 percent do. According to Dr. Clifford Winston of the Brookings Institution, deregulation saved consumers $12 billion last year.

Undoubtedly, these fare reductions have contributed to the dramatic increase in the number of people who have been able to travel by air. Between 1978 and 1986, for instance, annual passenger enplanements grew 60 percent, from 275 to 440 million. Ten years ago, only 25 percent of the public had ever flown. Now the figure is 72 percent. Air travel now is truly within reach of the average American.

Deregulation additionally has enhanced the position of the United States in world markets. Increased competition resulting from deregulation has made U.S. flag carriers more lean and efficient. This efficiency, coupled with the extensive pools of domestic "feed" traffic developed by U.S. carriers, has enabled U.S. carriers to compete vigorously against their formidable foreign flag adversaries.

Also, in hindsight, my general concern that smaller carriers could not survive in a deregulated environment has proved correct. Proponents of deregulation had argued that there were insufficient economics of scale to place the largest airlines at a competitive advantage. But they failed to realize that airlines starting out with ubiquitous route systems had natural marketing advantages (in such areas as frequent flyer programs and computer reservations systems). Pressured inexorably by the marketplace, carriers have had to become more efficient, and in the airline business size, on the one hand, and competitiveness and efficiency, on the other, go hand in hand.

Texas Air exists today only because we were able to increase exponentially in size. In my judgment, the growth that Texas Air had to achieve could not have been accomplished internally. Rather, it had to happen by acquisition. Just recall that Braniff—one of the most successful regulatory-ERA airlines—met its downfall when it attempted a large internal expansion in the late 1970's. Launching new routes from scratch requires massive upfront capital expenditures. For smaller carriers, the returns on such investments were at best modest and slow because frequently the only place to expand was into routes where large carriers were already deeply entrenched. Furthermore, an absolute prerequisite for airline expansion is having the necessary airport gates and other facilities. The availability of these facilities was limited, and the most viable way for an expanding airline to acquire them was through the acquisition of another airline. Notwithstanding these formidable hurdles, we were successful in starting up New York Air. But that was a time-consuming, management intensive, high risk process that could not have been duplicated across the country to produce the mass of growth required.

So, Texas International of 10 years ago grew into Texas Air of today largely by acquisition. Most importantly, in the case of Texas Air, each acquisition created more competition in domestic aviation, not less. This cannot be overemphasized. Contrary to some airline mergers, each acquisition by Texas Air was approved not only by the Department of Transportation, but by the Department of Justice as well. Texas International's merger into Continental was a classic "end to end" merger where the merged whole was more competitive than the independent parts. The Eastern acquisition initially raised questions, but only in the New York-Washington and New York-Boston shuttle markets. We answered those questions by divesting certain assets to another air carrier.

In 1986, Continental brought Frontier Airlines back from the dead. Frontier had ceased operations. Its employees were no longer working; its planes were no longer flying. It was competing with no one. By buying many of Frontier's assets, rehiring many of its employees and resuming service over much of its route system, Continental brought increased competition to the Rocky Mountain States historically served by Frontier.

Such was also the case with Continental's acquisition of People Express. While People Express was still operational at the time of its merger with Continental, it lacked the financial resources to continue another 45 days absent a cash infusion from Texas Air. Again, by acquiring People Express, Continental preserved air service and the jobs necessary to produce that service.

It is true that five airlines—Texas International, Continental, Eastern, Frontier and People Express—that at one point in time were independently owned and operated now are part of Texas Air. It is not true, however, that these consolidations have had an adverse impact on competition. To the contrary, I believe that the airline industry today is more competitive than ever before with the benefits of such competition flowing directly to the travelling public.

In determining the proper role of the Federal Government in the deregulated environment, I believe that we should first recognize that a truly free marketplace is the most effective regulator of all. We should not turn back on deregulation. Most calls for "reregulatory" measures have been a reaction to problems not all of which are a function of deregulation.

The history of the airline deregulation has been one of change, and the process of change is continuing today. Looking back, it is apparent that deregulation has produced both lower fares and an increased frequency of service—just as it was supposed to do. Now, we are in a phase in which the most intense competition is in the service sphere. Airlines that once needed to offer very basic service now compete for passengers by improving service—both on the ground and in the air—and by expanding service packages such as frequent flyer programs. Now, more than ever the consumer has a wide range of choices—as to fares and fare restrictions, flight routing alternatives, and carriers (with different service reputations) upon which to fly.

In this setting, it is more critical than ever that consumers have adequate information to do meaningful comparative shopping. For the free market to really work, air travelers must be able to compare routings, fares, service and carriers on a meaningful basis. The public needs standardized information to be able to do this. I believe that the Government should take steps to ensure that this information is provided. For that reason, Continental took the lead earlier this year by petitioning DOT to establish uniform industry reporting standards governing on time performance, baggage handling and completion factor.

The Government should not, however, go further and mandate substantive service performance standards in the guise of "consumer protection." The marketplace can and will handle substantive issues that may arise.

Our recent experience at Continental provides a good case in point. Late last year, we began to absorb into the Continental system two troubled airlines—People Express and Frontier. Those consolidations produced a host of problems that created considerable unrest among our customers. In response to these problems and complaints, we reacted. We have moved in some of our best people to straighten out the snafus. We have hired additional employees. We have inaugurated employee training programs, investing some $60 million in 1987 to date. We have purchased additional baggage handling equipment and built new facilities. In addition, to reduce flight disruptions, we have increased the number of spare aircraft in our fleet, including what we term "hot spares," which are aircraft with crews ready to fly at virtually a moment's notice should the need arise. Overall, we are spending $400 million this year alone on quality improvements, and another $800 million on new aircraft.

We have been addressing our "quality-of-service" problems directly, not because we have been told by the Congress or DOT to do so, but, rather, because we know that reliable, high quality air service is the only way to succeed in the marketplace. We have lost customers because of performance problems, and are trying extremely hard to win them back.

I am gratified by the successes we have had so far. DOT recently released its on-time performance data, which show that Continental's performance in September was the third best in the industry, only slightly behind American and Southwest. Texas Air's other carrier, Eastern, ranked fourth in the industry, only slightly behind Continental. At National Airport, which is well-known for its concentration of flights, Continental had the *best* performance in the industry, with an 83.5 percent on-time rating.

Let me particularly note that all of these accomplishments could never have been achieved were it not for the tremendously positive response by Continental's employees. These dedicated individuals have committed themselves to the improvement of Continental's service—a fact for which everyone in the company is extremely grateful.

Our recent successes in no way diminish our resolve to improve even more. Those who might argue that reregulation is necessary to strengthen an airline's resolve to provide quality service are off base. Indeed, statistics suggest that competitive market forces are at least as effective a discipline on air service problems as regulation was. Based on CAB data, the Nation's ten *best* city-pair markets in October 1978 in terms of on-time performance had on-time ratings of between 90.7 and 89.9 percent. Continental's *average* on-time performance of 81.1 percent in September 1987 compares very favorably.

Although there should be a maximum reliance in market forces in aviation, the Federal Government has a positive and critically important role to play in the following areas:

Safety: The Federal Government plays a vital role in setting and enforcing safety standards in the air transportation industry. No effort should be spared in this regard. The FAA has done a commendable job to date. In testimony before the aviation safety commission this summer, I specified some positive steps that might be taken to make the FAA more effective. I am attaching a copy of my prior testimony for the committee's consideration.

The FAA's efforts complement each airline's own commitment to safety. Several years ago, Continental faced a difficult safety situation. In August 1983, the International Association of Machinists struck, but we continued to operate safely. On September 23, 1983, Continental filed for chapter 11 reorganization; the workforce and scheduled operations were immediately reduced. One week later, the Air line Pilots Association and the union of flight attendants struck Continental, and we continued to operate safely. From then through now, Continental has placed the highest priority on airline safety. The recent tragedy in Denver has affected us all deeply, and brings home the reality that, as I stated in my opening remarks, we must never conclude that aviation operations are "safe enough." We can never relax our vigilance, even for a moment, in our effort to run the safest airline possible.

Information Disclosure: As noted above, for airline deregulation to work, travelers must have access to sufficient and accurate information about service options in order to make informed choices. That means that the traveler going from New York to Miami needs to know not only what airlines fly, when the flights are, and the fare options, but also some underlying information about each airline's relative performance.

The concept of public disclosure is an important element of S. 1485, the aviation legislation that recently passed the Senate. I strongly support the disclosure element of that legislation. On the other hand, Federal legislation should not go beyond information disclosure.

Antitrust Enforcement: The antitrust laws must be rigorously enforced. As I note below, there exist today anticompetitive problems, particularly with respect to computer reservations systems, that require active Government intervention. In recent years, aviation antitrust responsibility has been shared by the Department of Justice and DOT. It is the Department of Justice, however, that has pervasive experience with the antitrust laws. In my view, it is time to subject the airline industry to the same antitrust procedures to which other industries are subject. I applaud the Senate for providing in S. 1485 for early sunset of section 408 of the Federal Aviation Act, DOT's merger authority. (But we cannot support mandatory labor protection, for reasons that are well known.)

Airport and Airway Capacity Expansion: The federal government must be involved in the planning and implementation of airport and airway expansion. As a result of deregulation, air carriers have expanded service and created new hubs, resulting in more flights using the nation's airports and airspace. Between 1980 and 1986, for instance, annual aircraft departures grew 31 percent, from 7 million to 9 million. Annual available seat miles grew even more dramatically—67 percent between 1978 and 1986. As I mentioned earlier, from 1978 to 1986, passenger travel grew 60 percent. The result has been a taxing of the nation's existing airway and airport capacity, and a related increase in airway and airport congestion. The situation must be corrected.

It is altogether appropriate for the federal government to be the leader on this issue. No local airport authority or airline evaluating the possible expansion of facilities is going to consider adequately the costs and benefits of the decision to the nation as a whole. This is a role for the federal government—to ensure that the capacity of the nation's airports and airways, a valuable economic resource, is at the optimal level. I congratulate the congress for recognizing the need for a higher level of airway funding.

There are two concrete steps that must be taken before the optimal level of capacity can be achieved. The first is for the government to determine precisely what the capacity of our nation's airspace is, and what it could be with various expenditures and technological improvements. Computer models are in existence to accomplish this. Indeed, FAA administrator McArtor already has begun to study the capacity issue, and I am extremely encouraged that he has done so.

The second step is to evaluate the social and economic cost implications of federal airway and airport capacity expansion decisions. Today, those decisions are driven solely by federal budgetary constraints. Basing those decisions on the federal budget is extremely short-sighted. For instance, some say that the government simply cannot afford to invest in certain types of new technology to expand the nation's airway capacity. What those individuals don't consider is that if the expansion project is not undertaken, certain communities will not receive expanded air service, and this may translate into an exodus of industry and jobs from those communities. It is only *part* of the equation to know that a capacity expansion project will cost the federal government $X million; a currently unknown—but vital—aspect is how much local, regional and national economic activity will be lost, and what the impact will be on GNP, if the project is *not* undertaken. For example, we know that the interstate highway system cost well in excess of $150 billion to construct. The economic wealth generated by this transportation infrastructure, I am sure, far exceeds this cost. I believe firmly that our "highways in the sky" are equally critical to our national economic welfare. I urge that a study calculating these costs and benefits be prepared by GAO or another independent agency.

The question of airport slots raises the same kind of social and economic issues. If slot contraints are placed on airport capacity at additional HUB airports, some communities will lose service. This phenomenon, of course, has occurred at national airport, as a result of slot constraints. This reduction of service has very real social and economic costs for the communities that lose the service—as new industry fails to locate in such areas and existing industry relocates. These costs (of not expanding capacity) should be quantified, to the extent possible, and factored into the nation's airport and airway capacity expansion decisions. On the other hand, new slots constraints should not be imposed.

One issue that relates directly to airport and airway capacity is noise policy. Since our airway system is a valuable national resource, it makes no sense at all for constraints to be imposed on an *ad hoc* basis by local groups. Noise policy should be made on a federal level, following a full evaluation of all of the nation's competing objectives, and the federal determination should preempt state and local involvement.

Before I conclude my testimony today, I would like to briefly focus on an additional issue—an extremely pressing one—concerning the airlines' computer reservations systems. Here is where there is a genuine need for federal government involvement, and where I believe the Federal government has fallen short.

In 1977, before deregulation, many didn't foresee the critical role that CRS systems would come to play in the marketing of air transportation. At that time, there were a relatively limited number of carriers on given routes, and the carriers and their discount fare offerings were relatively stable. Travel agents didn't need to rely on computers to a major extent to do their jobs.

Today things are very different. Air travel options change continually, and CRS systems are the predominant way by which air travel selections are made. Travel agents handle 80 percent of all ticket sales, and rely on CRS systems to make reservations.

Today, the CRS systems of two carriers—American and United—dominate the market with 74 percent of CRS revenues. This dominance is *not* the result of the free play of market forces. At the outset of deregulation, American and United had the most expansive route systems of the nation's airlines. Other carriers had to play "catch up." It is only natural that travel agents would flock to those two CRS vendors, because of the comprehensiveness of the services then offered by each.

Other potential CRS vendors have not, to date, been able to penetrate the market. This is because of barriers to entry, most notably among them being the liquidated damages provisions in the American and United vendor contracts with travel agents. Texas Air's computer reservations system contracts do not contain liquidated damages provisions; but we have been hampered in our ability to sign up additional travel agencies because of the liquidated damages provisions in their existing contracts.

This, in a word, is anticompetitive. Moreover, it prevents consumers from having the benefit of access to new reservations information that competitive CRS vendors might provide.

Government action to make CRS systems competitive, so that travelers and their agents may rationally choose among airline competitors, is urgently required. To begin, we need effective enforcement of the antitrust laws with respect to CRS vendors. Moreover, a significant part of the problem would be solved if Congress were to prohibit the use of punitive liquidated damages clauses now found in certain CRS vendor contracts and renewals.

In closing, I would like to emphasize that airline deregulation has been good for the country. The premise underlying deregulation—reliance on the market mechanism—should be preserved and, where necessary, strengthened. This can be done through vigorous enforcement of the antitrust laws and by establishing requirements for adequate disclosure of standardized information so consumers can make meaningful travel choices. S. 1485, quite properly, is built on this principle; and it should be maintained in conference when S. 1485 and legislation before the house are evaluated. Legislation that goes further and imposes substantive standards on airlines is, in reality, anticonsumer, because it eliminates the consumer's ability to make up his or her own mind about travel-related options.

Additionally, the government must continue to play a strong role in safety. And it should become more involved in decisions—such as airway capacity decisions—where the costs and benefits to an individual airline or airport are different from the costs and benefits, to the nation as a whole.

Thank you again for the opportunity to testify before you today.

[The following information was subsequently received for the record:]

TEXAS AIR CORPORATION
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December 31, 1987

The Honorable Ernest F. Hollings
Chairman
Senate Committee on Commerce, Science
and Transportation
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Recently you forwarded two questions, submitted by Senator Larry Pressler, to Frank Borman following his testimony before the Senate Commerce Committee on behalf of Texas Air Corporation.

Attached are responses from Continental Airlines and Eastern Airlines concerning the training and hiring of pilots. Should you need additional information, please do not hesitate to contact me.

With best regards,

Sincerely,

Frederick D. McClure
Staff Vice President
Government Affairs

Question for Airline Representatives
from Senator Larry Pressler

According to your testimony, the Airline Deregulation Act has allowed large-scale entry into the industry. I won't dispute that. However, I think that deregulation has had a very negative effect on our nation's Air Transportation system. Prices have skyrocketed and our smaller communities and rural areas would not have service without the guarantee provided by the Essential Air Service Program.

Earlier today, we heard testimony from the Office of Technology Assessment concerning the human error factor and the need to focus on the important issues of adequacy of training and level of experience for those in the aviation industry. Does your airline or the industry have a plan to improve training programs? Do you have any suggestions for addressing the problems of low levels of experienced pilots and maintaining an adequately trained work force?

Continental Airlines Pilot Training and Hiring

1. Pilot Training

Continental Airlines, the Houston-based carrier owned by Texas Air Corporation, began an expansion of its pilot training program in early 1984. Although the program in place prior to that time was in full compliance with Federal Aviation Regulations and approved by the Federal Aviation Administration (FAA), Continental embarked on a program designed to refine existing programs, while adding instructional hours to different phases of pilot training.

One such development, implemented in January 1985, was Cockpit Resource Management (CRM). In addition to the two-day workshop seminar required of every pilot, the CRM precepts have been expanded into every facet of pilot training and checking. This also includes a review in the annual recurrent training ground school. Further, when a pilot is promoted to higher status in the cockpit, another day of CRM training is required. To insure that all individuals involved in pilot training are well-versed in CRM, all management and supervisory pilots are required to have another day of recurrent CRM training each year.

An essential ingredient of the CRM program was recently added to the simulator training syllabus. This program, Line Orientated Flight Training (LOFT), will become a recurrent program for all pilots beginning this year. LOFT will require copilots and flight engineers to receive a second training period annually so as to insure that a full crew is always present during LOFT simulator periods. It will also result in each pilot being trained in a simulator every six months. Given the highly automated aircraft now being flown by Continental flight crews, this element increases in importance. This additional requirement is in excess of FAA requirements.

Adjustments and improvements in Continental's training programs result from ongoing evaluation of the constantly changing airline operating environment. Improvements in the training program will occur on a continual basis so that the highest level of safety and proficiency will be reinforced constantly and consistently with operationally changing needs.

2. Pilot Hiring

Since November 1983, Continental has dramatically expanded its pilot force, hiring an average of between 500 and 1000 new pilots each year. The basic hiring criteria have not changed from a desired college degree, 2500 hours of total flight time, a commercial license, a multi-engine rating, a first class medical certificate, and a successfully passed FAA flight engineer's written examination. Initially applicants' resumes are screened for these basic criteria. Assuming these criteria are satisfied, two levels of interviews are conducted by the Personnel Department and management pilots. Additionally, a thorough background investigation is conducted, including a check on FAA records. Despite the basic criteria of 2500 hours total flight time, company statistics indicate that pilots hired at Continental have averaged over 4000 hours of total time. This level is equal to or higher than the average of pilots hired from 1965 through 1979 at Continental Airlines. Indeed, during the 1965-1967 expansion of Continental, pilots were regularly hired that had 700 total hours of flight time.

As has been noted on many occasions, the pool of experienced pilots will continue to diminish in the future. As a result, airlines will be forced to establish programs to develop pilots to meet expansion needs. Continental has already begun this process by interviewing college graduates from two and four-year aviation programs who have the required ratings and from 300 to 500 hours of flying time. Those pilots selected will become "interns" in Continental's Pilot Development Program.

Under this program, "interns" will be trained and utilized as flight engineers for a period of not less than one year. During this period, the pilots will be given extensive training in a Phase Two Simulator. Following successful completion of this program phase, the pilot will be assigned to a Continental-affiliated commuter carrier where pilot experience will be further augmented. The second officer and flight engineer experience provided during the first phase of the Pilot Development Program will result in commuter carriers having pilots superior to today's average new hire commuter pilot.

Finally, following a one to two-year period during which invaluable flying experience will be gained, the pilot will be eligible to return to Continental as a first or second officer, dependent upon the individual's seniority. The Pilot Development Program is an excellent means to provide for a succession of highly qualified, professional pilots sufficient to meet Continental's future growth needs while insuring the highest level of safety for its passengers.

Eastern Airlines - Pilot Training and Hiring

Eastern Airlines, a Miami, Florida, based subsidiary of Texas Air Corporation, has a Flight Resource Development team that is responsible for the planning, development, implementation and maintenance of pilot training programs. The team is currently comprised of roughly 75 individuals, including two Directors, four Managers, six Engineers and a highly qualified group of professionals responsible for six specific areas of training development. These areas include:

- The Pilot Entry Program
- Cockpit Resource Management
- Program Development
- Flight Simulator Operations and Business Development
- New Cockpit Systems Development
- Flight Operating Instruction

Eastern believes that one of the best means for addressing the problem of low experience level pilots and maintaining an adequate work force is accomplished through its Pilot Entry Program (PEP). PEP results from the joint efforts of Eastern Airlines and regional colleges throughout the United States. Eight locations have already been selected, including Florida, Texas, Virginia, Illinois, Colorado, California, Washington, and Massachusetts. Because of the joint resources of Eastern and the academic institutions, students are provided with a constant state of the art program in the classroom, simulator and cockpit. PEP is designed around an Associate Degree in Aviation Science with a path to a Bachelor's degree, if desired. During the college based instructional period, students will receive a private and commercial license, multi-engine and other instrument ratings and the Flight Engineer written examination. During this time, academic and flight training will be under the direct supervision of an Eastern Airlines instructor.

Upon graduation, application and selection for PEP, students will attend an Advance Training Center where their skills will be honed and directed toward specific aircraft training. Here focus is upon advanced flight simulators, turbo-prop aircraft and aeronautical related academic study. When students complete the Advanced Training Center program, they will be assigned to a regional/commuter carrier for two years, during which time valuable and much needed experience in aviation operations and flying will be obtained. At the conclusion of this two-year period, pilots become eligible for employment with Eastern Airlines as a flight engineer, or they may elect to remain with the commuter carrier.

A copy of the suggested curriculum at the two or four-year institution, and the training syllabus for the Advanced Training Center, is attached at Exhibits 1 and 2.

Cockpit Resource Management is an Eastern program designed to assist flight crews in managing and interacting within their cockpit environment. The management skills necessary for a Captain, for example, have not in the past been as well defined as the technical skills required to operate aircraft. The goal of this program is to enhance the pilot's communication, judgment and decision-making skills so as to improve the cockpit environment and its safe operation. This program is being used as standard training for Eastern check airmen, as well as for the management team supporting the flight training operation.

The Program Development Team applies advancements in training, technology and methodology to the specific areas of airline pilot training. The most significant current project is the development of a computer-based, interactive video training program for the A-300 airplane. This program will employ state of the art techniques to enhance learning in all Eastern aircraft as well as within the PEP curriculum.

The flight simulator department at Eastern began an aggressive program to upgrade and improve the quality of its pilot training program early in 1980. Since that time, over $25 million have been invested in improving the quality of the company's flight simulators. At present, Eastern has approximately $100 million worth of Federal Aviation Administration (FAA) approved flight training equipment. These trainers incorporate the latest in technological developments, and Eastern is committed to developing the highest quality standards for training. Line Orientated Flight Training, supported by the Eastern simulator team, has been a part of the Eastern curriculum since 1978. These full mission simulation programs are constantly under review for additional improvements and enhancements.

The CHAIRMAN. Mr. Beauvais.

STATEMENT OF EDWARD R. BEAUVAIS, CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER, AMERICA WEST AIRLINES, INC.

Mr. BEAUVAIS. Thank you, Mr. Chairman. I am CEO of America West Airlines. We started in 1983 with three airplanes serving four cities. We now serve 45 cities with 60 Boeing 737's, seven Boeing 757's, and three De Havilland Dash 8 aircraft. We expect to carry ten million passengers in 1987.

I believe deregulation, at least until recently, has been successful. This is not to say that there have not been problems, such as the nagging question of service to small and medium sized cities, and it has not yet been addressed effectively.

There are, however, several storm clouds on the horizon in the U.S. airline industry, even in spite of some successes of deregulation. And in my view, these issues must be addressed.

First of all, the most significant impediment to safe growth in air transportation is the existing air traffic control system, which has simply not kept pace with demand. And the burdens imposed by that system fall particularly upon new entrants that have not yet fully developed their systems. I know this committee has directed substantial attention to this matter and we must all continue in our efforts to achieve a safe and efficient air traffic control system.

A second issue of critical importance is airport access. One of the important motivations for many of the recent acquisitions has been to gain competitive control of the operating environment at an affected airport, be it in the form of control of slots, gates, or other airport facilities. This result is antithetical to the goals of deregulation and is a serious impediment to new entry, and this is a problem not only at the capacity controlled airports, where the existing buy-sell rule simply does not permit new entry, but also at other airports in the United States where entry has become extremely difficult. And if the possibility of new entry does not exist, service will deteriorate and fares will go up.

Finally, the ownership and control of computer reservation systems must be addressed. The systems currently owned by the mega-carriers are in my view at the root of much of the unreasonable industry concentration, excessive market domination and monopoly power that we face today.

While DOT began a limited investigation of this matter earlier this year, the DOT study does not address all of the abuses and remains uncompleted. I believe the only effective way to assure that consumers receive accurate and unbiased information is to take the ownership and control of these systems out of the hands of the mega-carriers.

Deregulation works for our industry as long as a legitimate free enterprise system exists. Free enterprise works if the industry is workably competitive. Barriers to entry, on the other hand, destroy the ability to compete freely and permit an oligopoly to form.

The oligopoly in turn destroys efficiency. This damages service quality and quantity and forces consumer prices higher. These conditions, if not addressed on an urgent basis, could bring about the failure of deregulation.

Thank you very much. I would be pleased to answer any questions that you or members of the committee may have.

[The statement and questions follow:]

STATEMENT OF EDWARD R. BEAUVAIS, CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER, AMERICA WEST AIRLINES, INC.

Mr. Chairman and Members of the Committee, I am Edward R. Beauvais, Chairman of the Board and Chief Executive Officer of America West Airlines, Inc., a post-deregulation airline that began operations a little over four years ago. The Committee is to be commended for conducting these important hearings, and we appreciate the opportunity to appear before you today to discuss our experiences, how we see our airline, as well as the airline industry, changing in the coming years, and the need for federal legislation to address problems that have occurred relating to competition and service since deregulation.

BACKGROUND OF AMERICA WEST AIRLINES, INC.

By way of background, America West is one of the few remaining post-deregulation carriers. We began operations as a new entrant airline in August 1983 with three Boeing 737-200 aircraft operating to and from our Phoenix hub and the cities of Los Angeles, Kansas City, Colorado Springs and Wichita.

Since that time, we have grown dramatically, now serving a total of 45 cities in the Midwest, Southwest, Northwest, Canada, California, New York and Maryland/Washington, D.C. from our Phoenix and Las Vegas hubs, operating a total of 60 Boeing 737, 7 Boeing 757, and 3 de Havilland Dash 8 aircraft. In 1987, we will carry over 10 million passengers. We now have a total of over 6,000 employees, almost all of whom own stock in our company and participate in our employee profit-sharing plan. Insofar as the future is concerned, America West will take delivery of a total of 15 new Boeing 737-300 aircraft in 1987, 1988 and 1989, as well as 3 additional Boeing 757 aircraft. By 1988, America West expects to have the most modern fleet in the industry.

As you can see, we have come a very long way in a relatively short time. We are healthy and competitive and seek to grow—not by acquisition, but by offering better service and lower fares than our competitors. And, this brings me, of course, to the subject of today's hearing, where does the airline industry find itself today, where is it going, and what is the appropriate role of the federal government in ensuring increased safety and quality air service?

OVERVIEW OF THE FIRST NINE YEARS OF AIRLINE DEREGULATION

On an overall basis, I believe deregulation has—at least until recently—been generally successful. We have had new carriers, including America West, enter the national air transportation system, some service levels have increased substantially, and, perhaps most importantly, fare levels in many markets have dropped dramatically, thus permitting ever greater numbers of the American public to take advantage of that system. This is not to say that there have not been problems, such as the important question of service to small and medium-sized communities that still needs to be addressed effectively, but, in general, I think it is fair to say that the American public has benefitted significantly from airline deregulation. There are, however, several storm clouds on the horizon that must be addressed if the benefits of airline deregulations as envisioned by Congress will continue to be available in the future.

In the nine years since the passage of the Airline Deregulation Act, there have been numerous changes in the competitive environment for providing airline service as the industry moved from one that was highly regulated in 1978 in all commercial facets to one that is essentially unregulated today. While many of the early activities were pro-competitive and led to important benefits for the traveling public, several of the relatively recent structural and marketplace developments have had particularly negative competitive implications. And, these developments have, in turn, compelled a substantial re-thinking of the workings of deregulated airline markets.

Prior to, and at the time of the enactment of, the Airline Deregulation Act, it was generally thought that airline markets would, without regulation, approximate a competitive model. This would occur, it was thought, because of the nature of the inputs necessary to provide airline service and the manner in which then-existing deregulated airline markets performed. As to inputs, it was emphasized that aircraft were mobile, inputs could be purchased from others, and air carriers made use of publicly provided airports and airways, thus suggesting (in the view of the commentators) an absence of substantial "sunk" costs, that is, costs that are unrecoverable if the new service is abandoned. These conclusions were buttressed by analyses purportedly indicating that there were no significant economies of scale in the airline industry and that airlines had relatively equal access to technology.

These analyses also focused on competition in the two markets where stringent entry restrictions and price regulations did not then exist—the intrastate market for scheduled service and the domestic and foreign charter markets. In those markets, one found low fare levels, simplified fare structures, and relatively high load factors (which, in turn, resulted in less excess capacity and lower effective costs per passenger to the airline). Based on these factors, it was predicted that competition in deregulated airline markets would approximate, as noted above, a "competitive model," with cost-based pricing, survival of low-cost airlines, a smaller role for service competition, and little opportunity for predatory activity (since there were few sunk costs).

The one aspect of the "perfect competition" theory that was not demonstrated in either the regulated or the then-existing deregulated airline markets was the presence of a large number of firms in any given city-pair market. Consequently, commentators began to rely upon so-called "contestability" or potential competition theory to support their predictions that deregulated airline markets would behave competitively. Under the contestability theory, there is no requirement that there be a number (let alone an infinite number) of carriers in any given market. Instead, the theory assumes that airlines that are not serving the market can, in effect, be "perfect" potential entrants by offering a supply response whenever a "monopolist" airline in a market either charges higher than competitive prices or produces less service than would be produced if competition were present. Such a response by the "new" actual entrants would, in turn, force the "monopolist" airline to adjust its price and/or service offerings to competitive market levels. In order for this phenomenon to be effective, the commentators suggested that the following conditions must exist: (1) equal access to economies of scale and technology; (2) no sunk costs; and (3) price sustainability.

Unfortunately for these commentators, and as is discussed in greater detail in a recent comprehensive and thoughtful article by Michael Levine (one of the early proponents of airline deregulation), contestability theory "turns out to be wrong as a predictor of the behavior of deregulated airline markets." [1] And the principal evidence that airline markets cannot be modeled on the basis of the contestability theory is that, while one would have expected incumbent airlines to reduce their prices to levels consistent with the costs of potential new entrants, no holdover, higher-cost carrier, save Continental, has been able to lower its costs to new entrant levels. And, what has, in fact, occurred is that these larger pre-deregulation carriers with higher cost structures are, for the most part, the survivors. During this period, the carriers have adopted revenue-earning strategies that generate monopoly rents which cannot be duplicated by lower-cost new-entrant firms, and have also been able to impose costs on the new entrants with a consequent reduction in production cost differentials between the holdover and new carrier. This ability both to extract rents and to cause cost increases for new entrants is, of course, totally antithetical to the contestability theory, and clearly indicates that the factors which have permitted the pre-deregulation carriers to behave in this manner must be understood and evaluated most carefully in order to understand the future workings of the airline industry.

Among the most important of these anti-competitive factors is the concentration that has occurred over the past two years. In this regard, there was a significant increase in the number of certificated air carriers providing scheduled air service with large aircraft from the period 1978 to 1985, but recently approved acquisitions have reversed that trend and, if one includes the acquisition of Piedmont by USAir, the resulting number of such air carriers will actually be 20% *below* the 1978 level. Moreover, while the national market shares of the top five carriers and ten carriers declined from 1978 to 1984, that trend has reversed and those carriers' shares now exceed the pre-deregulation levels. Furthermore, although the national Herfindahl-

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[1] M. Levine, "Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy," 4 Yale J. on Regulation 393, 404 (1987). Our witness in the USAir-Piedmont acquisition proceeding, Professor Severin Borenstein, demonstrated, empirically, that the contestability theory does not accurately describe the airline industry.

Hirschman Index ("HHI") for the top 20 carriers providing domestic service dropped by nearly 300 points (or 25%) over the period 1978 to 1985, the series of consolidations that have been approved will increase the national HHI by over 400 points above the 1985 level (*i.e.*, by nearly one-half) and by almost 200 points above prederegulation levels. And, as Julius Maldutis, Vice President of Salomon Brothers, Inc., testified before this Committee on November 4, 1987, 80% of the 50 largest airports in the United States are "highly concentrated" within the meaning of the Justice Department's merger guidelines.

While these increases in concentration levels are significant in and of themselves, many of the "competitive" initiatives that have been undertaken by the airlines were not either predicted or understood at the time of deregulation. Indeed, the competitive implications of certain of these developments is only now being fully appreciated. Included among these initiatives are the emergence and development of hub and spoke operations at airports throughout the United States, airport slot and gate access and use practices, computer reservation systems, travel agent commission override programs, increased vertical integration through code-sharing and marketing agreements, frequent flyer programs, and complex fare structures and related yield management programs. We have also seen predation, numerous new entrant fatalities and the succession of mergers and acquisitions over the past two years—all of which have had a profound deleterious impact on the competitive environment in which airline services are now being provided.

FUTURE NEEDS AND THE ROLE OF THE FEDERAL GOVERNMENT

From the standpoint of a carrier such as America West that is seeking to expand the scope of its low-cost, low fare operations, the most serious of these competitive impediments to its future growth and entry into new markets include: (1) inadequacies of the existing air traffic control system; (2) airport access issues, including slots and terminal facilities; (3) abuse of computer reservation systems; (4) travel agent commission overrides; and (5) frequent flyer programs.

Turning initially to air traffic control, I think that there is general agreement that the most significant impediment to *safe* growth in air transportation is the existing air traffic control system, which has, quite simply, not kept pace with the demands placed upon it by deregulation. And, it is important to note that the principal burdens resulting from the inadequacies of that system fall upon new entrants, such as America West, that have yet to develop their route systems fully. I know that this Committee has worked diligently to assure that this system is adequate to handle the ever-growing demands in a safe and efficient manner, and we all must work towards that goal in the future if the traveling public is to receive the full benefits of our Nation's air transportation system.

As regards the question of airport access, one of the most significant, if not the most significant, motivations for many of the acquisitions that have occurred over the past two years has been to gain competitive control of the operating environment at the affected airports—be it in the form of control of slots, gates, airport facilities and the like—a result which is both antithetical to the goals of airline deregulation and stands as a serious impediment to a carrier like America West being able to initiate or expand its operations as it attempts to grow. As the members of the committee may be aware, America West has filed a petition for rulemaking with the Federal Aviation Administration demonstrating that the buy/sell regulation, which was adopted in Decmeber 1985 in order to, among other things, provide competitive access at the federally-controlled high-density rule airports for new entrants, is simply not working and must be modified to assure realistic and equitable access by new entrants. We filed the petition on July 1, 1987, and we are still awaiting a decision by the F.A.A.

And, in addition to the important problems of access at the four capacity-controlled airports, there are several other airports in the United States, including Denver, Atlanta, San Francisco, Los Angeles and Dallas/Ft. Worth, where new entry is extremely difficult. Indeed, the airport study prepared by Mr. Maldutis, which analyzes airline competition at the 50 largest U.S. airports since deregulation, makes it quite clear that many of these large airports have become, in effect, either monopolies or duopolies.

Another critically important issue with pernicious competitive consequences is the present ownership and control of computer reservation systems. The negative competitive effects of these systems, which are presently dominated by American, United, and, to a lesser extent, Texas Air, T.W.A.-Northwest and Delta, must be addressed as soon as possible. Indeed, the majors' CRS systems are, in my view, at the root of the unreasonable industry concentration, excessive market domination, and monopoly power that we face today, and have led to conditions that permit these large carriers to increase prices, reduce services, and reduce competition. Moreover, it is these systems and their inherent biases that seriously impede entry into new markets and compromise the ability of carriers like America West to grow larger. While the Transportation Department, at the urging of the Congress, initiated an investigation of those systems earlier this year, the investigation does not address all of the competitive abuses and has, as you know, yet to be completed. In the last analysis, I believe that the only effective way to assure that these critically-important systems provide accurate and unbiased information to consumers at the lowest possible prices (which, after all, should be their goal), is to take the ownership and control of those systems out of the hands of the megacarriers.

An issue closely related to the anti-competitive effects of computer reservation systems is the payment of override commissions to travel agents. These overrides are typically paid to travel agents on the basis of revenue generated above a specified minimum level in a given period, and, equally typically, the megacarrier that is paying such a commission to the agent has already installed its computer reservation system in that agency. Thus, it is no wonder that these carriers are able to achieve and maintain high enplanement shares in cities where these systems and payment programs are in place, and that it is particularly difficult for carriers without such market power to enter these markets. At a minimum, the traveling public should be informed that the agent is eligible for such override commissions and from which carrier.

As regards frequent flyer programs, these programs, although quite popular, are among the most antithetical to the spirit and goals of airline deregulation. As Mr. Richard James, Piedmont's Vice President of Planning testified in the *USAir-Piedmont* proceeding, "No event in this industry has done more to create brand loyalty than frequent flyer programs." These programs operate to "lock" consumers into an airline, effectively making it more costly for passengers to switch carriers in response to fare differences. This, in turn, lowers the cross-elasticity of demand among airlines, making their products poorer substitutes for one another. And, as such, frequent flyer programs clearly act as a device facilitating avoidance of competition on price and other terms by lowering the ability of new entrant carriers to attract customers with deep-discount fares. The programs were originally aimed at business travelers, who are recognized to be the least price-senstive segment of airline demand. The programs do not promote new business, they simply allow airlines to charge higher prices for the business that they are already receiving. In the process, they also increase the difficulty that an entrant will face in trying to establish itself in a new market.

America West is ready, willing and able to compete with any carrier in the United States. Indeed, with our remarkably low cost structure, we are as able as any carrier to compete in today's airline market. But, if we are to be an effective competitive force in the marketplace, it is critically important that there be competitive integrity in the industry. And, it is in this context that we ask this Committee to evaluate carefully the anti-competitive effects of the various issues that I have discussed today in order that, over the long-term, the public will receive the full benefits of deregulation.

QUESTIONS OF THE CHAIRMAN AND THE ANSWERS

AIR TRAFFIC CONTROL SYSTEM

Question 1. You mentioned your concern with the air traffic control system. What steps should be taken to improve the margin of safety in the ATC system? Are there too many aircraft operating in the system to be able to ensure safety?

Response: As the Committee is well aware, the existing Air Traffic Control System is a substantial constraint on the ability of the commercial air transportation system to grow. While there is no question that more controllers are needed in order to improve the margin of safety (and we recognize that steps are being taken to increase the number of controllers), we would also urge that the existing system be reevaluated on an ongoing basis to increase both its safety and efficiency. In this latter regard, we would point out that the recently-implemented East Coast Plan reportedly has reduced delays by over 35%, and it is expected that delays will be further reduced by 10–15% when the plan is fully operational next spring. The F.A.A. has also developed a similar "West Coast Plan," which, if implemented, will increase the capacity of the system in the Western portion of the United States by reducing the number of bottlenecks in that geographic area, which will, in turn, increase the safety of the system.

The major bottlenecks or choke points in the Western U.S. are caused by large blocks of airspace reserved for military use. The F.A.A. should revalidate Western airspace presently assigned for the exclusive use of the military. We believe that coordination with the Department of Defense could be accomplished in a short period of time by the F.A.A. Administrator, especially considering that there will be a Los Angeles International Airport runway shutdown for approximately six months in early 1988 which will greatly increase air traffic delays or substantially reduce service unless some action is taken to increase capacity.

The details relative to specifics as to what military airspace needs to be returned to the F.A.A. are contained in the F.A.A. West Cost Planning Group Report. The personal involvement of the F.A.A. Administrator would provide the impetus for early implementation of the West Coast Plan.

We feel that the F.A.A. Notice of Proposed Rulemaking issued on June 16, 1987, concerning "Terminal Control Area (T.C.A.) Classification and T.C.A. Pilot and Equipment Requirements" would greatly increase safety for the flying public. Specifically, the proposed rule requiring automatic pressure altitude reporting equipment (Mode C) for aircraft in all airspace from the surface, to and including 12,500 feet mean sea level within 30 miles of the primary T.C.A. airport, has the potential to greatly reduce near mid-air collision incidents between general aviation aircraft and air carriers at the major cities in the United States. Additionally, we recommend that the F.A.A. expand the processing capability of the ARTS-3A equipment to include Visual Flight Rules Mode C Intruder Conflict Alert Logic as an extra precaution in crowded airspace.

We support the F.A.A.'s proposal to establish a T.C.A. at Phoenix Sky Harbor International Airport. In terms of air carrier operations and passenger enplanements, Phoenix is the busiest city in the United States without a T.C.A. and is busier than nine at the present 23 T.C.A. sites. We strongly believe that a T.C.A. at Phoenix will significantly increase safety with the 15-million passengers that utilize the airport yearly.

Another problem facing the T.C.A. system is that there is nobody behind the deak at the terminal field facilities. For the most part, the field staff positions (planning, procedures, quality assurance, and training) are back on the firing line. There is very little local planning or procedural action being accomplished at the field level. This situation cannot be allowed to continue much longer.

FOREIGN OWNERSHIP

Question 2. It is my understanding that America West is partially owned by Ansett Transport Industries of Australia. What type of relationship do you have with Ansett now and what are your future plans? What types of advatanges and problems have resulted from your foreign partnership?

Response: In August 1987, Transpacific Enterprises, Inc., a corporation organized under the laws of the State of Washington and a subsidiary of Ansett Transport Industries of Australia, purchased approximately 3 million shares of America West Airlines, Inc. common stock, which stock, when aggregated with other stock previously held by Transpacific, constitutes 20% of the voting stock of America West. This stock was purchased by Ansett as an investment, and permits Ansett to name one person to America West's 11 member Board of Directors. This transaction was fully reviewed by the Department of Transportation prior to consummation, and, at the conclusion of that review, the Department reviewed that (1) the transaction of that review, the Department determined that (1) the transaction did not present any serious competitive questions (Order 87-8-31 at 5), and (2) America West remained a citizen of the United States within the meaning of Section 101(16) of the Federal Aviation Act. America West's only other relationship with Ansett involves several operating leases of Boeing 737 aircraft from another Ansett subsidiary. There are no present plans for additional involvement with Ansett.

America West has not encountered any problems in its relationship with Ansett, and, quite frankly, does not anticipate any such problems. The transaction simply represented an investment opportunity for a company with whom America West has been doing business over the past several years and resulted in a valuable infusion of capital into America West. As you may be aware, Australia has recently announced that it will be deregulating its domestic airlines in two years. Thus, Ansett saw this as an important opportunity to evaluate airline deregulations as seen through the eyes of one of the last U.S. post-deregulation carriers.

One final matter merits comment. In order to assure that America West remains a U.S. citizen and to ensure that control remains in the hands of U.S. citizens, America West has adopted an amendment to its certificate of incorporation to prohibit the acquisition by foreign persons of more than twenty-five percent of its stock. The amendment authorizes the Board of Directors of America West to adopt bylaws to implement this provision and ensure that America West remains a U.S. citizen within the meaning of the Act, which bylaw has been adopted by America West. In addition, America West has retained the right of first refusal if Ansett determines to sell any of all of its stock interest in America West.

AIRPORT SLOTS

Question 3. You have been very vocal about the problems of buying your way into National and LaGuardia airports. Has DOT's Buy-Sell rule worked? Do you think the market can be relied upon to allocate service? What is your suggested alternative?

What can be done to ensure access to those airports you mentioned that are not slot-controlled, but where new entry is almost impossible?

Response: On July 1, 1987, America West submitted a Petition for Rulemaking to the Federal Aviation Administration in which we demonstrated that the buy/sell regulation does *not* work at the LaGuardia and National airports. (A copy of the petition as well as the reply that we filed on September 18, 1987, is enclosed for your information). In addition, Judge Yoder made important findings in this regard after an extensive analysis of the operation of the buy/sell regulation in the *USAir-Piedmont Acquisition Case;* significantly, the final D.O.T. order in that case did not contest these findings:

- "The evidence shows that the slot market is effectively closed to new entrants and that the incumbents could extract a fare premium through the combined carriers' ownership of slots." (R.D. at 90);
- "The proposed acquisition would substantially increase the applicants' slot power at DCA and LGA and slot concentration at both airports and thereby substantially reduce competition and the likelihood of new entry at those airports. The difficulties for new entrant carriers to obtain slots for the commencement of DCA and LGA service would be exacerbated by this acquisition . . . " (R.D. at 99);
- The concentration ratios at these airports ". . . are well within the range in which the Justice Department guidelines suggest that the proposed acquisition may substantially reduce competition." (R.D. at 101); and
- "[S]lot constraints at DCA and LGA present substantial barriers to entry at these airports and the markets served by these airports and . . . the effect of the proposed acquisition would substantially increase those barriers and substantially reduce competition in numerous relevant markets." (R.D. at 102-3).

In short, there is no question that the buy/sell regulation is not working.

As is discussed in greater detail in our enclosed rulemaking petition, the short-term alternative that we have suggested at LaGuardia and National is a reallocation of slots from the two carriers (Texas Air and USAir) that hold over 50% of the slots at these airports to smaller and new entrant carriers up to a level of 18 slots in order to reduce the concentration levels and assure access at these airports.

In view of the fact that this market-based system does not permit new entry on any reasonable basis, however, it is imperative that a new mechanism be developed for addressing access issues at these and other highly-congested airports, which system should contain the following elements:

First, as Mr. Maldutis of Salomon Brothers demonstrated in his testimony before the Committee on November 4, 1987, the recent spate of mergers and the emergence of hub-and-spoke systems has meant that most of the larger airports in the United States are effectively either monoplies or duopolies. Thus, any allocation system should have, as one of its principal focuses, the reallocation of slots from the larger to the smaller carriers.

Second, the trigger mechanism for such a system should be as definite as possible in order to assure that its implementation does not delay entry.

Third, the reallocation provision should assure that the carriers seeking to obtain access at the airport actually receive a sufficient number of well-timed slots to begin an economic and efficient service.

Fourth, the carriers obtained slots through such a reallocation process should be required to use them for a substantial period of time.

COMPUTER RESERVATION SYSTEMS

Question 4. You advocate divestiture of the airline-owned computer reservation systems. What types of problems do these systems create that necessitates such a remedy? If divestiture is not possible, what should be done?

Response: **It is beyond doubt that the airline-owned computer reservation systems give their owners market power, and it is equally incontestable that these owners have abused this market power over the past several years, be it in the form of biased presentation of the information, delay of inputting non-owner air carrier fare and schedule information, increased booking fees, and other anti-competitive practices. And, while both the Civil Aeronautic Board and the D.O.T. have attempted to study and regulate these abuses, the study and regulation of these incredibly complex systems have taken long periods of time and resulted in ineffective regulation. Under these circumstances and given the tremendous economic incentive on the part of the owners to develop these systems so as to benefit their own operations, the only long-term solution to this issue is to separate the ownership and control of these critically-imported information systems from the airlines. Indeed, the clear history of regulatory efforts to deal with these systems is one of the agency attempting to "catch up" with the latest set of problems created by the CRS owners—a frustrating and ineffective process that will, no doubt, continue in the future in the absence of divestiture.**

QUESTIONS OF SENATOR PRESSLER AND THE ANSWER

Question. According to your testimony, the Airline Deregulation Act has allowed large scale entry into the industry. I won't dispute that. However, I think that deregulation has had a very negative effect on our nation's Air Transportation system. Prices have skyrocketed and our smaller communities and rural areas would not have service without the guarantee provided by the Essential Air Service Program.

Earlier today, we heard testimony from the Office of Technology Assessment concerning the human error factor and the need to focus on the important issues of adequacy of training and level of experience for those in the aviation industry. Does your airline or the industry have a plan to improve training programs? Do you have any suggestions for addressing the problems of low levels of experienced pilots and maintaining an adequately trained work force?

Answer. As I stated in my testimony, airline deregulation has, in my view, been *generally* beneficial to the public, but the problems of service to small and medium-sized communities, many of which America West presently serves, remain to be solved.

The following is a list of programs presently in place at America West Airlines and approved by the F.A.A. which enhance and improve flight crew training:

A. America West has taken steps to improve our advanced simulation programs to include the following:

1. Increased Phase Two simulator training for the initial, transition, captain upgrade, and recurrent training programs.
2. Increased company-required simulator evaluations for captains and first officers.
3. Implementations of line-oriented flight training in all phases of simulator training.
4. Selection of highly experienced simulator instructors to provide an optimum training environment.
5. Development of a cockpit resource management program to be included in all phases of our simulator training program.
6. Acquisition of two Phase 2 simulators to enhance and improve and enable us to continue to expand our training programs.

B. America West has also incorporated the following programs to enhance our training program and extend benefits to our pilot group:

1. Inclusive in the initial training program is the "Designated Captain Program," which allows new hire crewmembers to fly their first month with experienced captains who were selected for their standardization and ability to communicate information to a new crewmember.
2. **Development of an "Audio Visual Library" which allows all crewmembers access to audio visual materials consisting of video tapes which include all areas of subjects pertinent to the operation of transport aircraft. We also offer access to computer based materials which allow the crewmembers to review basic operations of such systems as flight controls, electrical problems, and flight management systems.**

3. Development of computer software to allow flight crews to continue to review important subject areas of company operations to include systems reviews, company procedures, and to allow self-evaluation of their level of proficiency and knowledge.

4. Pilot input is one of the most important elements of the training programs at America West. We have modified our programs to reflect the input we receive from flight crews in order to make our training programs not only line-oriented, but effective.

The CHAIRMAN. Mr. Borman, most respectfully, I want you to comment on the situation that we understand in the trade that could be occurring. In other words, you talked about the free market and the labor sector has got to understand it and we have got to do away with the Railway Labor Act, and so on and so forth.

And yet, if you worked and you built an airline, and a lot of them have been with Eastern just like you for years on end, and you built it up. Then you see a fast mover like Mr. Lorenzo come in and declare bankruptcy. Then he recoups and comes back in after it has been declared bankrupt. Everyone has been run off and come in at an entirely different level of economic endeavor, buy up some of these lines, namely—and in addition, buy up Eastern. There is a feel that the more they can drain off from Eastern, from the high cost carrier to now the bankrupted, now low-cost Continental carrier, the better.

That kind of thing causes labor-management contesting and safety can suffer. We worry about it. I know some of the pilots that have come up here. I cross-examined them closely, because I used to try cases and I did not want just a dissident pilot or somebody just on behalf of the union just coming up and bitching about Eastern.

I am convinced that those pilots are genuine, because they have given other instances and everything else. I find a bit paranoia within Continental-Eastern right now when any one of them complains because of that draining off of Eastern into Continental, and an economic situation which the gentleman on your left is saying this is a wonderful American free enterprise system.

But I am seeing safety suffering. Correct me on that. What comment would you have? That is what we are worried about up here.

Colonel BORMAN. Sir, I came to Eastern 19, 20 years ago, and I love the airline. I would not be here today—and I did not leave Eastern by choice. I left it because the economic forces dictated that we had to sell the airline. And I love the people of Eastern.

And so it is not that I somehow willfully did this, but we did it in the best interest.

The CHAIRMAN. Well, I love it, too. I can tell you now, I know them all intimately.

Colonel BORMAN. Let me say this to you, sir. 20 years ago when I joined Eastern, we were in the midst of a pilot slowdown. This was under a regulated environment, and the slowdown, again, was destructive. Eastern was on the brink of bankruptcy 20 years ago.

And yet the pilots were exercising their economic clout and slowing us down. And one of my first functions at Eastern, I was thrown into the breach: Go negotiate with the pilots and solve the problem. Well, we solved the problem, but it cost us dearly.

Now, over the 17 years that I was active at Eastern we took the approach of trying to cooperate with labor. We put them on the board, we gave them profit-sharing. And their appetite was insatiable, until at the end it became a quest for control of the airline, not a quest for parity. The figures were indisputable.

The point I am trying to say is the economic value in the free marketplace is what is dictating this in my estimation, and not somehow a malevolent management. It would have happened under deregulation.

We came very close three or four times, Senator Hollings, as you know. We pulled it out every time with what I think were innovative programs. But we were never able to get particularly the Machinists Union to recognize—we got the others to agree, but we were never able to get them to agree—that the world had changed.

I think it is unfortunate, and yet I cannot understand, given the factors that they are having to deal with. You know, I carried the flag up the mountain as far as I could and then I handed it to somebody else.

The CHAIRMAN. Is there an affirmative action program or policy to blend Eastern into Continental and bring it down to a lower cost carrier?

Colonel BORMAN. To the best of my knowledge there is not, sir.

The CHAIRMAN. I have had, of course, the last hearing and we will have the hearing of some other pilots. Do you have any comment on that? Some of the pilots—of course, we had the head of the pilots also appear. But we have had two Eastern pilots appear, reporting deficiencies and asking in one instance for another craft and then being admonished later that evening, being told that the next time they ask for another aircraft they had better ask for another job, get a job somewhere else.

Colonel BORMAN. Sir, I do not have any knowledge of that. I have been out of Eastern now almost two years. I can say this, though, that it certainly was not and does not sound kosher to me.

The CHAIRMAN. This was a pilot who had been there 18 years. Mr. Beauvais, you started in 1983, is that right?

Mr. BEAUVAIS. Yes.

The CHAIRMAN. Now, you say take it out of the mega-carriers. You sound like one of us. We politicians know how to testify. But the fact is that Frank Borman and Eastern developed that market on the basis of public convenience and necessity some 30 to 40 years on the East Coast.

And of course the fact is that it was illegal prior to deregulation, illegal for you to land at the National Airport, for the simple reason that we had already met the capacity edge. We had already met the capacity edge on the basis of public convenience and necessity established.

Now, is it your position that that which has been established and everything else like that should take for the new carriers coming in and just throw it wide open and say, take so much from this and so much? In other words, something like civil rights, rather than an economic established right?

Mr. BEAUVAIS. No, I think that this is an economic issue, and I think that when you have a saturated airport that is slot controlled and that represents a barrier to entry, you have a serious problem. And I think you can solve that.

I think you have to regulate the administration of slots in order to preclude that being a barrier to entry, so that it protects the monopolies of those who are there, because you will see the very same thing that happened at Charleston happened in many cities. And, that is, you referred to that years ago when you had direct service to Washington National and now you do not.

You have got a monopoly condition whereby no one has an opportunity to really have the best service at that particular restricted facility. Whenever an airport becomes restricted, it should no longer function to protect the monopoly interests of the carriers there. There has to be some administrative procedure followed to a point where barriers to entry do not exist at that particular airport.

If airlines want to secure a monopoly by swarming an airport with service to a point where they saturate the physical facility, and then create a stronghold to permit them to be economically strong, they should lose that right if that facility cannot accommodate other carriers who want to come in to compete.

As long as you have an opportunity for competition, you will therefore have effective pricing and effective competition for the benefit of the consumer. So that when these airports reach that limit, then that is when the monopoly should be dissolved at those particular airports.

And that is our issue that we are extremely interested in at Washington National and New York's La Guardia.

The CHAIRMAN. Do you think the slot or the right belongs to the particular airport or community, or to the particular airline holder of that slot at the moment, or to the FAA? Who owns the slot as you see it right now?

Mr. BEAUVAIS. Well, as we see it right now the airlines own the slots. However, the FAA has the responsibility to administer the laws of the land, and the administration of those slots must comply with the other laws that are there, such as the antitrust laws.

And if the ownership of the slots results in a monopoly, then there is something wrong.

The CHAIRMAN. Well, you see, it has been the contention of some of us here on the committee that the slots really belong to that particular community, because it was for the convenience and necessity of that particular airport being served that the right for landing and takeoff was given.

And I strongly agree with you that you should not have this buy and sell proposition, because that is how I lost out. It so happened it went from National down to Pan Am down to Air Florida with the crash. And just as a financial thing, we have now lost the service due to the financial need then of Air Florida for some money.

So the slots are gone now and the service is gone. And that is totally wrong.

I have taken too much time. Senator McCain.

Senator MCCAIN. Mr. Chairman, you never take too much time, except when we argue about the qualifications of small plane pilots versus large plane pilots.

I might add, I never flew anything but a single seat aircraft.

The CHAIRMAN. I would fly with you, but I do not want one of these big carriers coming in as a C-5A pilot in my Cessna, I can tell you that, or Beechcraft.

Senator MCCAIN. Thank you, Mr. Chairman.

I must caveat that that I displayed my own particular skills by intercepting a surface-to-air missile with my own aircraft.

But I would like to—and I think that was the McNamaran method of winning the war, Mr. Chairman.

I would like to thank Colonel Borman particularly for the statement you made about the simulators. I think that is something we have a tendency to forget when we argue or discuss this issue of aviation safety.

In fact, many experts attribute our very successful safety record to the types of training that we are providing the pilots now, with incredible technological advances which have allowed us to put a pilot in a simulator and present him with all the emergencies in a realistic fashion, which perhaps 10 or 15 years ago we were not able to do.

I think that it is worth noting that some of these simulators are so realistic that it is almost impossible to tell that you are not in that particular situation.

Mr. Beauvais, I would like to first of all congratulate you for running a very successful airline, for proving that, despite the complaints and understandable concerns that you have, which you very eloquently state in your oral testimony, as well as in your written statement, that you can use a variety of ways, including employee morale—which is an important aspect of your airline—to prove that you can be competitive.

And I would just like to follow up what the chairman was saying on the issue of the slots, who should own the slots, is issue number one. And number two is, you have requested a rulemaking from the FAA, or there is a rulemaking in progress from the FAA concerning slots.

What would you suggest or what would be your recommended rule that the FAA should issue while at the same time not taking away, as the Chairman stated, the long-held positions that many of the airlines have held, particularly at the four airports that are capacity-controlled today?

Mr. Beavais. Well, it is our position that slots can be owned by a community or it can be owned by the airport, as long as the administration of those slots is evenly applied to the industry. And so as far as we are concerned in our proposed rulemaking for the reallocation of slots at La Guardia and Washington National, the generally accepted economic standards ought to be applied that eliminates the high concentration of dominant carriers at those facilities and allows new entrants opportunities to provide competitive service at these particular facilities.

So you can apply the Herfindahl Index to the concentration of service at that facility and that can determine just how slots should be allocated. And it should be kept in mind that once the facility becomes slot controlled, then it should not be a center of concentration by one or two airlines, where they build a massive route system, charge supra-competitive prices at that facility, and dictate just where that service can be provided, because then you do not have any ownership rights insofar as the slots are concerned by the airport there or the other cities that are receiving service from the airlines to and from that slot-controlled facility.

So as far as I can see, the ownership of slots can rest in the hands of the airport itself, but the administration should be consistently applied to not only Washington National and New York's La Guardia airport, but we are going to see more and more, as you heard this morning, more and more major airports come under this slot controlled condition.

JFK right now has slot control between 3:00 p.m. and 8:00 p.m. Chicago's O'Hare Airport will soon be that way. It is—right now it is a totally saturated facility and the demand for service there far exceeds the ability of slots to accommodate that need.

Los Angeles, San Francisco, Denver, those airports will soon be in that position. And so there needs to be some uniform way of dealing with proper access so that those do not represent barriers to entry, so that competition in this industry can still be the name of the game in a deregulated environment.

Senator McCAIN. I understand. But does that mean that every few years a certain number of slots will be provided to airlines that wish to use that airport, or does it mean that we go on a buy-sell basis, but that all or a certain number would be up for sale every year or for some number of years?

I do not understand the mechanics.

Mr. BEAUVAIS. I do not think you buy-sell on slots. What you do—and you could probably do this annually if there are requests for slots for service to that particular facility. There probably should be an ongoing commitment to operate that slot for a minimum period of time, such as a year to two years, or you lose it, it goes back to the FAA and they can conduct another lottery, to a point where it can go to another would-be entrant or any willing carrier.

As long as you have more airlines requesting slots than slots that are there to be given, then you have a condition that requires an administration of slots, and it can be visited annually.

Senator McCAIN. So you are suggesting a lottery system.

Mr. BEAUVAIS. Some form of lottery that determines the number, overall number. For example, our suggestion is that each carrier should have a minimum of 18 slots at a particular airport.

And so the entrant can come in and get between 12 and 18. I am not sure. I seem to recall—I think I misstated that. A minimum of 12 slots at each airport. And so for any entrant, they are eligible for that.

Now, you say to yourself, gosh, there probably are 50 airlines in the country that would want those slots. But there are not. There are not that many left. The massive consolidations in this industry are now down to a point where there are only a few carriers in addition to the mega-carriers that are operating.

And so there is not an unlimited number of airlines who want slots at particular airports. But they certainly should not be permitted to profit by their entry. They must be obligated to operate that service or lose the slot back to the FAA, so that it could be reallocated.

And the number that are to be allocated should be determined by the number of carriers who are interested, and that number should be extricated from the carriers who have the lion's share of slots at that facility.

Senator McCain. I see my time has expired.

Colonel Borman, do you have any comments on this?

Colonel Borman. Well, again, speaking from my experience at Eastern and as Senator Hollings said, we developed the markets, and our area of concentration was in the east.

Again, I am not speaking for anybody but from my past experience, but I think it would be very difficult for Eastern to all of a sudden say here is a new carrier, Air West, who has an economic advantage because their employee rates are about 50 percent of ours. They come in, and all of a sudden we have to share slots with them.

You know, you sell oil leases, you sell franchises, you do a lot. I think the slots belong to the carriers. I believe that it would be reasonable to differentiate the pricing of slots. A slot at a peak period, it seems to me, ought to cost more than a slot at 10:00 a.m.

It is a system, and there is, of course, a history here. It has worked through some very difficult times. So I would be adverse to any dramatic changing of the system.

Senator McCain. Thank you.

Thank you, Mr. Chairman. Maybe we could have one more round here. I am very concerned about this computer reservation system abuses.

The Chairman. We will come right back to you.

Senator Ford.

Senator Ford. Frank, let me see if I understood you correctly when you started. You said that you were no longer head of Eastern, that you went out on the ranch and cleared your head and started thinking some and flying some more and got a different perspective.

Did I hear you say that you now approve of deregulation?

Colonel Borman. Yes, sir, I did. It was clear to me.

Senator Ford. I sure wish you had made that decision earlier, because I could not get on Eastern because your people beat me over the head about deregulation.

Colonel Borman. We fought it very dramatically, but it was—

Senator Ford. How well I know.

Colonel Borman. But, as the Senator said, you have to learn and you have to have an open mind. Clearly, I think that the vast majority of people are better served by it, sir.

Senator Ford. If I understood your comment to Senator McCain's question as it related to America West, do you think the system ought to stay basically the way it is, and if somebody wants to buy your slot and you are willing to sell it and if America West has the money, then it could buy your slot?

Colonel Borman. I think it needs to say basically that.

You know, we went through lotteries with slots. We did a lot of the things, but my point is that there is a procedure that is in effect now that the FAA has effectively and difficultly administered over the years. Somehow it works.

Now, as I said before, I think one of the ways you could cut the congestion that we are all worried about is to let people pay more for slots at 6:00 out of LaGuardia.

Senator Ford. I think the figures show that America West carried only 2 percent, roughly, of the passengers, and that probably will exceed 10 million. So they have a small percentage of the number of passengers, but yet it is 10 million roughly, as I figure it here.

I am beginning to worry about slots, and I do not know how to accommodate it yet.

In the news, reading an article not too long ago, one airline, and I do not know whether it is domestic or foreign, is staying financially afloat based on the value of their slots at LaGuardia and National. They just decided if they wanted $2 million or $3 million a slot. They put that in as an asset.

Colonel BORMAN. It is an asset, sir.

Senator FORD. I know, but it is beginning to get into the millions of dollars for a slot. So that people do not misunderstand what we are talking about, that is a time you can land and a time to take off at a given airport.

So within an hour, if you have just one basic landing strip, what do you have, maybe 20 or 30 slots in an hour. If you have two, you might be able to double that.

So I am very concerned. Apparently America West is doing a pretty good job. They have been in business four years.

Look at the public statements by USAir wanting to acquire Piedmont. They want to compete with the big airlines, and if they did not acquire Piedmont they probably could not compete with the biggies.

Yet, look at last year's balance, the number of passengers they carried and the investment they have and their net profit. They are doing a lot better than some of the bigger ones. I am not sure they are going to be able to continue to do that now that they have merged.

It is bad when you get a merger and the pilot of the parent company is wearing his uniform and the one from the merged company is still wearing his and both of them are in the cockpit. There is something wrong with that, and I do not know how to get to it, Mr. Chairman. That is a personnel problem, and I am not sure.

You find the same thing in your maintenance people on the ground. We find Eastern is getting ready to fire 3,500 people. They want to take all the maintenance people off the airplanes and give them a $100 million retraining program and let them be maintenance people so they can hire at a lower price per hour. That is an economic factor.

I do not want to get into the economics of the airline, but I worry less about the luggage arriving than my arriving.

Colonel BORMAN. Sir, may I interject? I think the plan was to take the luggage handlers and retrain them into mechanics with a $100 million program. They were not taking maintenance people off.

Senator FORD. I am talking about the maintenance of the airplane; the people that sweep and clean the ashtrays out.

Colonel BORMAN. Those are the same categories as baggage handlers, yes, sir.

Senator FORD. Okay. They want to take those out and train them to be mechanics and bring in $3 and $4 an hour people to clean out the airplane and that sort of thing.

Colonel BORMAN. The reason for that is organizations like here. The new airlines and American Airlines with their service are paying people at a much lower cost. You cannot stay in business if you are paying somebody $16 an hour and Air West or America West is paying somebody $6 an hour.

Senator FORD. I understand that, but when you merge you have pilots that have 15, 16, 18 years, and they are out on their ear. There is just something about that.

I watch the little commuter in my hometown. I know the pilots' mothers and fathers. They are begging to get into Piedmont or US Air or be one of the better pilots. The one that flew me in Monday morning was asked have you heard from USAir yet. He said no, it has been a couple of months. So he has made an application to move up.

I am not sure that in my mind I would want to see that fellow up front yet.

Colonel BORMAN. Again, sir, and Senator McCain, I think the training programs and the simulators are the best that anybody in the world has been able to devise.

Senator FORD. Are the airlines giving that kind of training?

Colonel BORMAN. Oh, yes, sir.

Senator FORD. No question about it?

Colonel BORMAN. No question about it.

Senator FORD. You wanted to follow up?

Mr. BEAUVAIS. Yes. I need to respond to a couple of comments.

Number one, the buy/sell rule on slots is not working. It is failing. We cannot buy a slot. They are not for sale. So there is no such thing as a buy/sell rule on slots.

Second, the salary disparity described by Colonel Borman is not accurate. America West pays its people in most cases more than what these people could make at any competing carrier. Our salary levels are quite significant. Our starting salary levels for a pilot are $22,000 per year, much higher than the starting levels for pilots at American and Eastern.

So what we have is a very effective complement of experienced people who are electing to stay at America West because they like where they are. They like their opportunities, and they like the compensation that they get.

Many of our pilots this year will be making between $70,000 and $85,000 per year. So the earnings level in terms of people at America West is very effective and very acceptable to the people at America West.

The economic difference between our efficiency level and those of Eastern is primarily centered in the airplane. We have the world's most efficient fleet compared to any airline in the entire world. We have nothing but twin engine aircraft in our fleet. We have 60 Boeing 737s. We have seven Boeing 757s, and we have three de Havilland Dash 8s.

They are all twin engine. They are all advanced. Most of them are high bypass engines. Most of them are the most recent technology in the industry, and with the twin engine efficiency both in terms of maintenance costs and operating costs, that gives us our economic advantage. It is not starting people at $6 an hour.

Colonel BORMAN. May I just say this was a case when I was still at Eastern, which was two years ago. Of course, we had more 757s than you do.

I think the thing you are talking about is basically nonsense. Your salary level was about 60 percent of ours, and your top pilot salary today is less than our average. It was a nice try, but let us be a little honest about it.

Mr. BEAUVAIS. You pay your captains too much.

Colonel BORMAN. I agree.

Senator FORD. That may be part of the problem.

Mr. Chairman, I just want to make one statement.

If you go back to the basic problem on slots, I guess we gave those slots to the communities.

Senator MCCAIN. For free.

Senator FORD. Now they are selling for millions.

The CHAIRMAN. It is on the proof of convenience and necessity of air travel at those communities.

Senator FORD. I understand that.

The CHAIRMAN. They have to maintain that level of service; otherwise, the CAB could take it away from them.

Senator FORD. So now we have to get back to the proposition that worked from whence it came.

The CHAIRMAN. Right, and you and I do not own this seat. When it comes up to the next election, you and I will get thrown out if we do not do the job. That is the way it works.

If you would just withhold a second, John, let me ask one question since we are on the maintenance of the contracting out. I get a feel that rather than the team spirit of everybody working, the reservation people, the pilots, the attendants and what have you, also the maintenance people. They get to know each other and work with the pilots and what have you.

Now I understand the pressures of the market, the economies of operation mandate to just go ahead and contract that out. When you do that, then you break that sort of connection and respect and comradery and what have you, and maintenance goes down.

Is there any comment about just contracting it out and saying that it somebody else's responsibility, and if the plane crashes we will blame the contractor, not us?

Do either of you want to comment on that?

Colonel BORMAN. Eastern is mostly in house. I do not know whether you contract out most or not. You might be the best to contact, although I certainly do not have any problem with contracting out because you contract out to FAA-approved repair stations, and it is sometimes much cheaper to send things out to somebody that specializes in it than to have a small group of people that cannot operate fulltime on their own.

I do not know.

Mr. BEAUVAIS. Most of our maintenance up until February of this coming year will be done by Canadian Airlines International, a very sophisticated, very highly qualified airline.

So the quality of maintenance that we have had in terms of contract maintenance has been very good. It has been very expensive, however, and so when we elect to go in house with our maintenance in 1988, we will save a great deal of money because we will be more efficient at it than the outside contractors.

The CHAIRMAN. Let me yield to Senator McCain. I will let you take over, and I will go to vote and come right back.

Senator McCAIN. Thank you, Mr. Chairman. I think we might have two votes, from what I was told, so that may cause us a problem.

The CHAIRMAN. Well, we may have to recess momentarily, but I want to come back for the next panel.

Senator McCAIN [presiding]. Thank you, Mr. Chairman.

I wanted to get into this issue of computer reservation systems and get your view, Ed, and that of America West, and perhaps Mr. Onstad would want to respond, since I think you are representative of the other side of this issue.

For the record, perhaps you might be able to lay out what you feel is the unfairness of the present system, and maybe Mr. Onstad could respond.

Mr. BEAUVAIS. The computer reservation system is a very rapidly developing technology in our industry that ties the travel agent industry into the airline industry.

The travel agents now produce 70 percent of all business that airlines do, and there are five major computer reservation systems that exist that these travel agencies use, and these are owned by the airlines.

These systems are biased. These systems have major override programs built in that cause the travel agent to lock into the particular carrier/owner. These systems are serious barriers to entry because they cause airline owners to enjoy a significant market share advantage.

What we see, therefore, in this industry is that these are at the foundation of the massive consolidations that are taking place. Western Airlines elected to be sold to Delta because they did not have theirs. Republic sold to Northwest because they did not have theirs. Ozark sold to TWA because they did not have theirs.

So we are now seeing a rapid consolidation in this industry. By the buying carriers being the owners of the CRS system, this gives them a significant advantage in the marketplace. It truly is a barrier to entry for the nonowners, and it is so serious that it must be investigated.

In our judgment, the solution to this is not further concentration in the industry, which will happen if nothing is done. The solution is to take these systems away from the carrier/owners. Make them freestanding, independent, profitable enterprises and, believe me, they will be extremely profitable. This industry can, therefore, be adequately balanced with a bonafide competitive atmosphere which is critical to the success of deregulation.

Mr. ONSTAD. Thank you, Senator. We bring kind of a unique perspective to this. Several years ago, we started the campaign to regulate the computerized reservation systems at Continental Airlines. In fact, we appeared before this committee two or three years ago, asking for divestiture. Unfortunately, this committee rejected that notion.

We tried all over Capitol Hill for divestiture. Failing that is one of the prime reasons why we acquired Eastern Airlines, because we could not get action from the Congress, and we needed a computerized reservation system.

Since that time, we are faced with the fact that two major carriers have been found to be monopolists in this by the United States Department of Justice. They control 74 percent of the market today.

We have been on Capitol Hill recently advancing a provision to break down barriers to entry; namely, right now, today, a travel agent has to pay liquidated damages to the major carriers to change computerized reservation systems. We think that is a barrier to entry that ought to be dealt with.

We have been exceedingly frustrated in the Department of Transportation's failure to move forward in this issue of the whole computerized reservation system. We believe there are areas where today, the rules that were established by the Civil Aeronautics Board are not being enforced.

For example, the rule says very specifically that any reports developed by the vendor have got to be made available to anybody who wants to pay for those reports. You do not get them on a real time basis from the major carriers. In fact, you get them somewhat later.

We think that competitors such as America West, Eastern and others ought to get them on a real time basis because we know that on day one they are developed, and on day two the competitors in the travel agency are trying, in fact, to use those reports to induce travel on the airline.

So we may not agree at this point on the question of divestiture, but we certainly agree that there are competitive abuses that need to be dealt with in this issue, and more access to the systems need to be opened up.

Senator **McCain**. I believe that there are abuses as well, and I will do everything I can to motivate this committee and the Department of Transportation at least to remove those abuses. I think they are clear.

Did you want to say anything, Colonel?

Colonel **Borman**. Well, at Eastern when we started out, when this system started, we supported and tried to get an industry-neutral system, and it went away because we could not get everybody involved in it. So it is not an easy task, but I agree with everything that everybody here has said today.

Senator **McCain**. Thank you. This is very important testimony.

This committee will stand in recess until the Chairman returns. Thank you very much.

[Brief recess.]

The **Chairman** [presiding]. The committee will please come back to order.

I am sorry for the interruption, but we still have a very important panel: Mr. David Davis, the executive director of the Massachusetts Port Authority; and Mr. Earl Hord, commissioner at the Department of Aviation in the City of Chicago.

STATEMENT OF EARL HORD, COMMISSIONER, DEPARTMENT OF AVIATION, CITY OF CHICAGO

Mr. HORD. Thank you and good afternoon, Chairman Hollings. It is good to be here, and I really appreciate the opportunity to offer testimony to the Senate Commerce, Science, and Transportation Committee.

The CHAIRMAN. Mr. Hord, your statement in its entirety will be included. You can highlight it if you want. The only reason I mention that is because we might have another roll call and we are getting near the lunch hour, and I do not want to have to leave you again.

Mr. HORD. I will take that into consideration and highlight what I have here, sir.

The CHAIRMAN. Very good, sir.

Mr. HORD. My responsibilities do include overseeing the management, operation, development, and safety of Chicago's three airports. We think deregulation has been good for Chicago, it has been good for our airports, and we think it has been good for the entire region.

Chicago has always served as a major hub in the nation's air transportation system, and deregulation has had a very positive impact on us. The airport that has most enjoyed the progress of deregulation has been Midway Airport. It owned the title of the world's busiest before O'Hare. That was up until 1961.

When O'Hare was opened, it had a devastating effect on Midway and on the southwest side of Chicago. The economic impact was very severe. The number of passengers going through Midway dropped to about 728,000 in 1978.

However, as a result of deregulation, primarily as a result of the deregulation of airlines, it has risen to 5.3 million passengers in 1987, or it will have risen that high and that is an estimate.

In 1978 there was only one airline that offered three non-stop flights from Midway Airport. Today there are eight that offer a total of 160 daily non-stop flights. And most of this growth can be attributed to Midway Airlines. Midway Airlines has enjoyed a phenomenal growth at Midway Airport. We think it is a primary benefactor of deregulation.

Thus, Midway Airport has become a post-deregulation hub, bringing jobs, economic stimulus, lower fares, and greater air travel options to the public in and around the southwestern side of Chicago.

Now, at O'Hare the effects of deregulation are a bit different. We have had a change in the number of airlines that service O'Hare, and the number of cities that are serviced with direct service are about the same. What we have seen, however, is an increase in international flights. That has gone from 16 up to 23.

The biggest change has occurred in the dominance of key airlines, United and American. These two major airlines who hub at O'Hare have captured an increasing share of all enplaning passengers in the period following deregulation. They have moved from approximately 45 percent of the total operations in 1978 to around 65 percent in 1986. And we think this increase can be attributed to a significant increase in the number of markets they serve and the development of close ties with regional and commuter airlines.

We believe it has been a favorable development, increasing competition at O'Hare, reducing air fares, improving the quality of air service among the airlines. However, we do not consider O'Hare to be a completely deregulated airport, due to restrictions imposed by the high density rule. O'Hare is currently one of the five airports subjected to the "Quota Rule".

We believe there are valid justifications for questioning the continued need for the Quota rule at O'Hare, as well as other airports. The physical facilities at the airport have changed since the Quota rule was put in place, as have the FAA traffic control procedures.

Now, in order to accommodate the existing and forecast increase in passengers and aircraft operations at O'Hare between now and the year 2000, the City of Chicago is in the midst of a $2 billion development program. This $2 billion development program is being funded through dollars raised by the airlines through debt.

The major features of this development program include a new terminal for United Airlines, which opened last summer. There is also an expanded roadway system, new cargo complex, new international terminal, and an automated people mover system to move the people from the roads and the parking lots into the terminals.

In total, there are 90 different construction projects involved in this development program. Now, with the added gates, taxiway system, extended runways, ramp areas, and other aeronautical improvements, our evaluation of the capabilities of O'Hare International Airport indicate that it is capable of landing and departing more traffic than is presently allowed.

In 1986 we accommodated a record traffic level of about 795,000 operations and almost 55 million passengers. Our forecast for the year 1990 of 840,000 operations indicates a processing capability of about 165 operations per hour.

Now, with minor air traffic control improvements we think this number can grow safely to about 180 operations per hour. I point out that we are now at 155 as a result of the high density rule.

The CHAIRMAN. How does that compare, say, with National?

Mr. HORD. With National Airport? I have those numbers here and I could give them to you.

The CHAIRMAN. This is something that we are familiar with, and we are talking about operating on the edge of capacity. And I am beginning to wonder. It is a wonderful thing, the improvements of a $2 billion expenditure, because I have observed it up there and we commend you for it.

But you are getting beyond the edge of capacity when you get up to 180 operations per hour.

Mr. HORD. Well, the concept is this. We think the configuration of the airfield, the configuration of the runways, are such that it allows us to operate the airport as though it were two and sometimes three airports simultaneously.

This facility should be maximized. We should take full advantage of it so long as we are operating safely and we are not creating delays.

The CHAIRMAN. Now, suppose—I flew into the airfield there—of course, I had a transponder—back in 1956 in a light plane. Now, if you were operating on the concept of here we have got three airports operating in one, can I fly under the rules and regulations now without a transponder into that Chicago air corridor?

I have got to have some kind of identification, do I not?

Mr. HORD. Well, in——

The CHAIRMAN. And I am thinking about the Los Angeles situation. It seems like everybody can just fly around willy-nilly out there, and we have got a bill in now to require transponders on not just the 23, but all of the airports where the FAA has a radar system.

But you are one of the 23 where it is required, I take it?

Mr. HORD. Yes. We would support the utilization and the requirement of transponders on all aircraft. And we also are in support of the other technological advances, the collision avoidance devices that are available. We think that as they are developed and as they become affordable, they ought to be required in virtually every aircraft.

As a matter of fact, if I may depart a bit from this, the position that the city has taken is that the airport itself ought to be operated in the freest possible way, unencumbered, and allow the market forces, as long as they do not impose problems with respect to safety and delay, allow market forces to determine access to the airports.

The CHAIRMAN. Well, on that score, does the FAA keep up with you? I mean, if I am getting almost double the flights, are they giving you enough controllers and expertise in the tower there to handle it?

Mr. HORD. We think that there are enough controllers today. We think the expertise there is adequate. We think the equipment needs to be updated and needs to be constantly updated.

We think that the trust fund ought to be allowed to be used freely for what it was intended. In other words, if there is a need to improve the quality of the traffic controllers, the number of traffic controllers, or the equipment at any airport, including O'Hare, those funds ought to be used for that purpose.

The CHAIRMAN. Well, I agree. Go right ahead.

Mr. HORD. In deference to the time constraints, Senator, what I would like to do at this point is to depart from my text, it is on record, and leave it there, and allow my colleague to make his statement and then respond to questions.

The CHAIRMAN. Very good.

[The statement and questions follow:]

STATEMENT OF EARL F. HORD, COMMISSIONER OF AVIATION, CITY OF CHICAGO

Good morning Chairman Hollings and members of the Senate Commerce, Science and Transportation Committee. My name is Earl Hord, I am the Commissioner of the City of Chicago's Department of Aviation. I am responsible for overseeing the management, operation, development, and safety and security of the City of Chicago's three airports—O'Hare International, Midway and our lakefront airport, Meigs Field. Thank you for the opportunity to present testimony today on the impact of de-regulation on the airports in Chicago.

De-regulation has been good for Chicago, our airports, and the region. Chicago has always served as a major hub in our nation's air transportation system. A primary change brought about by de-regulation is evidenced by the role of Midway Airport in our airports system. Midway Airport lost its title and the majority of its activity when O'Hare assumed the role of the world's busiest airport in 1961. This change had a devastating effect on the economy of the City's South West side. With de-regulation, activity and the attendant improvements in air service at Midway Airport has sky-rocketed from a near ghost town of 728,000 annual passengers in 1978 to an estimated 5.3 million passengers in 1987. In 1978, one airline offered three daily non-stop flights from Midway Airport. Today, eight airlines offer a total of 160 daily non-stop flights from Midway Airport. Most of the phenomenal growth at Midway Airport can be traced to the success of Midway Airlines—a prime beneficiary of de-regulation. Thus, Midway Airport has become a post de-regulation hub bringing jobs, economic stimulus, lower fares and greater air travel options to the public.

At O'Hare International Airport, the effects of de-regulation are a bit more subtle, but can be seen nonetheless. In 1979 O'Hare was served by 15 domestic carriers, 10 foreign flag carriers, 10 all-cargo carriers and 7 commuters. By 1985, 2 new domestic carriers, 6 new international and 5 additional all-cargo carriers were operating. Although a few more carriers are operating, approximately the same number of non-stop cities are being served domestically. Foreign cities have experienced the greatest increase in service, growing from 16 cities with non-stop service to 23 cities.

Our biggest change has occurred in the dominance of the key airlines. United and American, the two major airlines who hub at O'Hare, have captured an increasing share of all enplaned passengers in the period following deregulation. From approximately 45 percent in 1978, these two carriers increased their share of all enplaned passengers at O'Hare to nearly 65 percent in 1986. This increase can be attributed to a significant increase in the number of markets they serve, and the development of close ties with regional or commuter airlines. We believe this has been a favorable development, increasing competition at O'Hare, reducing air fares, and improving the quality of air service among airlines.

However, we do not consider O'Hare to be a completely de-regulated airport, due to the restrictions imposed by the High Density Rule. O'Hare is one of five airports currently subjected to the "Quota Rule". We believe there is valid justification for questioning the continued need for the Quota Rule at O'Hare as well as other airports. Physical facilities at the airport have changed since the Quota Rule, as have FAA air traffic control procedures.

In order to accommodate the existing and forecast increase in passengers and aircraft operations at O'Hare between now and the year 2000, the City of Chicago is in the midst of a $2.0 billion development program at the airport using funds raised by airline debt.

Major features of this O'Hare Development Plan include a new terminal for United Airlines which opened last summer, an expanded roadway system, a new cargo complex, a new international terminal and an automated people mover system. In total, there are over 90 different construction projects involved in the development program at O'Hare.

With the added gates, ramp areas, and other aeronautical improvements, our evaluations of the capabilities of O'Hare International Airport, indicate that it is capable of landing and departing more traffic that it is presently allowed. In 1986 we accommodated a record traffic level of approximately 795,000 operations and almost 55 millions passengers. Our forecast for the year 1990 of 840,000 operations indicates a processing capability of about 165 operations per hour within our present operating environment. With minor air traffic control improvements, we think that this number can grow safely to about 180 operations per hour.

These growth levels are consistent with our attempts to minimize the delay levels at our facilities. Accounting for the major adjustments that occurred due to the 1982 PATCO situation and the general economic conditions of the early 1980s, activity has grown since 1979, while our noise levels and delay levels have decreased. O'Hare is the world's busiest airport, but is does not have the greatest level of delay. However, present restrictions in the form of the High Density Rule, preclude us from allowing more than 155 operations per hour. The major investments that have been and continue to be made by the airlines at our airports, are indicative of the faith that these carriers have in our facilities and their processing capabilities.

The Senate should take all steps to foster improvements to accommodate future demand; instead we are artificially restraining it. The High Density Rule and slots are an example of such restraint. Airport operators are frequently asked for their opinions about slots and the ability of carriers to buy and sell the slots. We take issue with the need for the Federal government to continue to regulate our airport through the High Density Rule and slots. Since our airport is able to process more passengers and operations than the High Density Rule permits, we should apply our energies to de-regulating the hourly level of operations at airports like O'Hare. Aviation Trust funds should be used to adequately staff the system so that the facilities are allowed to safely process the traffic that we know is there.

An economic by-product of the High Density Rule has led to the buying and selling slots. We oppose the buying and selling of these public assets, if the Chicago airports are forced to continue operating in the restricted slot environment. The buying and selling of slots will lead to an environment that is contrary to the real intent of de-regulation. At an airport like O'Hare where slots are both scarce and very expensive, the ability of new entrant carriers to enter the market is artifically inhibited. O'Hare will continue to be dominated by the prederegulation established carriers who can afford the premium price. In this kind of environment the major carriers may not have the same kind of competitive drive operation as would be stimulated by their introduction of new carriers into the market. Route structures, service to smaller markets and ticket prices can be affected.

The City of Chicago has been working for nearly a decade to encourage the FAA to eliminate the High Density Rule and the resuming slot allocation at O'Hare. The air carriers at O'Hare have committed to massive expenditures within the last 5 years to provide the necessary facilities at O'Hare. We have succeeded in bringing our terminal facilities into balance with the existing and future processing capabilities of our airfield. The FAA must keep pace by improving its ability to handle the operations that our airports can easily accommodate. We feel that the travelling public would be far better served by providing the funds needed to modernize and to staff the system.

With projections of increased air travel for the future, solutions must be found in the full utilization of existing airport resources, in funding for capacity building and development programs and system improvements, not in artificial constraints. With the high density rule in effect the City and the airlines lose all incentive to invest in further facility improvements. This is contrary to the capacity needs of the nation's air transportation system. From our perspective, the key solution is funding for air transportation system improvements.

All of the development projects at O'Hare promise to act as a stimulus for the entire regional economy. O'Hare currently represents a total economic impact of over $9 billion a year on the regional economy. As an employment source alone, O'Hare ranks as the seventh largest in the State of Illinois. Over 186,000 persons are employed in jobs that are directly or indirectly related to operations at O'Hare. By 1995, the economic impact of O'Hare Airport is expected to grow to $13 billion. However, we feel that regulation, through capacity custraints and slots will inhibit our full economic potential. With the migration of industry away from our region over the last decade, Illinois can ill afford to allow a primary magnet of new business, our airports, to become a factor that repels rather than draws, due to artificial restraints.

In addressing de-regulation, we must also consider two other very important elements of aviation; safety and noise. Operators of the busier air carrier airports in this country have a limited degree of control over both of these important issues. However, in the area of safety, airport operators can provide additional facilities to ease capacity constraints and must also encourage and support FAA technological improvements. The City of Chicago is doing both of these at our airports and is actively cooperating in joint efforts with the FAA. We are currently completing the $2 billion development program at O'Hare and another $200 million improvement program at Midway. These improvements will enable these two very important airports to handle traffic well into the early 21st century.

Similarly, we have supported numerous technological improvements, all of which can not move forward without the support of the Senate. Actions such as:

- Increased funding and staffing of the air traffic control system, with particular emphasis on the air traffic control towers and control centers,
- Technological modernization such as use of Airport Radar Service Areas (ARSA) at reliever airports such as Midway, mandatory Mode C transponder requirements and mandatory Traffic Alert and Collision Avoidance systems (TCAS II)

We applaud the efforts of Senator Ford in moving the AIP reauthorization program forward. Many of the the technological improvements can only come from a Senate commitment to accelerate the release of funds so that they can be used in the manner that they were intended. In addition, we must not let the AIP program continue to become entangled in the Unified Federal Budget.

In the area of noise, the City of Chicago is also moving to reduce the population exposed to noise. Numerous programs are underway at our airports including City/airline funding of school soundproofing, nighttime operating procedures, ground operating restrictions and the conduct of Part 150 Noise studies. However, as we continue to implement new noise abatement procedures at O'Hare to reduce the area impacted, our suburban neighbors continue to allow new homes to be built in already noise impacted areas. The net effect is the erosion of the benefits that we provide.

Aircraft noise will never completely disappear. Our experts indicate that the number of people affected will be reduced somewhat by our actions and that of FAR Part 36 compliance. However, until airport operators are given some control at the Federal level over the use of the land surrounding our airports, the battle between airport operators and adjacent neighbors over air traffic will continue.

We feel that the solutions to the issues facing the aviation industry can be eased by cooperation between the Federal Government and local airport operators. However, we feel strongly that it must begin with a legislative initiative to provide the critical funds to make improvements, not to re-regulate. The funds must be made available to begin to make immediate improvements. Airport operators will never ask for a compromise to safety. Therefore, we feel that it is imperative that the Senate look to full appropriations from the Aviation Trust Fund for answers to many of these difficult issues.

Capacity improvements must come from the institution of system efficiencies. Therefore, all available funding from the Aviation Trust Fund must be applied now to this important task of assisting the FAA with upgrading the existing technology to handle the aviation future.

Funds must also be made available to airport operators that need assistance in achieving capacity improvements. Re-regulation will only provide a short term patch to issues that can better be addressed through increased appropriations and use of already available and designated funds.

Thank-you. I will be glad to answer any of your questions.

City of Chicago
Harold Washington, Mayor

Department of Aviation
Earl F. Hord
Acting Commissioner

Suite 3000
20 North Clark Street
Chicago, Illinois 60602
(312) 744-6892

December 4, 1987

The Honorable Ernest F. Hollings
Chairman
Senate Committee on Commerce, Science,
and Transportation
Washington, D.C. 20510-6125

Dear Senator Hollings:

I want to thank you again for extending the invitation for the City of Chicago to testify before your committee on airline deregulation.

In response to your letter of November 23, regarding follow-up questions to my testimony, I have enclosed five (5) copies of my answers.

If I can be of further assistance or should you require more information, please do not hesitate to contact me.

Sincerely,

Earl F. Hord
Commissioner

Enclosure

RESPONSES OF EARL F. HORD, COMMISSIONER OF AVIATION, CITY OF CHICAGO, TO QUESTIONS RAISED BY SENATOR ERNEST F. HOLLINGS
DECEMBER 4, 1987

I. AIRPORT SLOTS

Q. You have expressed your opposition to the buying and selling of slots at O'Hare. Are they being sold at all, or just being held by the incumbent carriers? What is your suggested alternative to DOT's rule?

A. As you know, the regulation of the buying and selling of slots is the responsibility of the FAA, pursuant to FAR 93, Subpart S. O'Hare Airport has 1670 slots. Carriers are permitted to trade and sell slots without restriction, though as a general rule, incumbent carriers do not sell their slots. The FAA monitors slot utilization. If a given carrier utilizes a slot less than 65% of the time over a two (2) month period, the FAA takes back the slot. About every six (6) months, the FAA holds a special lottery on vacant slots. Twenty-five percent (25%) of these slots are reserved for new carriers. Through this process, a new carrier can obtain, at no cost, a maximum of four (4) slots. However, in reality, usually no more than two (2) slots are available during a lottery for new entrants.

At a High Density controlled airport like O'Hare, slots are scarce and even if they were readily available for sale, the price, currently averaging around $500,000.00, artifically inhibits the ability of new entrant carriers to enter the market. Slots available through the lottery simply are not enough for a new entrant to begin operations. Under this system, O'Hare will continue to be dominated by the pre-deregulation established carriers who can afford the premium price. Thus, the intent of deregulation, competition, suffers, and route structures, services to smaller markets and ticket prices can be affected.

As an airport operator, I oppose the buying, selling and trading of public assets. If slots are sold, the profits should be retained to increase capacity or for air safety improvements, not to financially benefit the carriers. I am concerned also by the disincentive implied by a buy/sell rule that ultimately creates a situation in which expansion of airport capacity is stifled by operation restrictions.

My fundamental objection to the buy/sell rule is that it is not the correct solution to constraints in the air traffic control system. As I indicated in my testimony, we are investing $2.0 billion to bring O'Hare terminal facilities into balance with the existing and future processing capabilities of the airfield. With the added gates, ramp areas, and other aeronautical improvements, our evaluations of O'Hare indicate a capability of safely landing and departing more traffic than is presently allowed under the High Density Rule. We have and will continue to argue for the elimination of the Quota Rule. At a time when full utilization of the nation's airport capacity system is needed, we can ill afford to restrict access to available assets. In a similar vein, the buy/sell rule should be phased out as existing and impending air traffic control improvements come on line.

2. AIR TRAFFIC CONTROL

Q. **Chicago has experienced a number of problems with the air traffic control system in the past two years. In your view, has the FAA done an adequate job in handling the traffic levels generated at O'Hare? What needs to be done to ensure that the margin of safety in the ATC system is increased?**

A. The City of Chicago has full confidence in the FAA's abilities to provide professional air traffic control services today. The FAA's safety record in Chicago and the nation has been exemplary. However, we share the concerns articulated throughout the aviation industry that the FAA must keep pace with the growing aviation demand by improving its ability to safely process operations that our airports can easily accommodate. The FAA must move aggressively to hire and train additional air traffic controllers, and accelerate the delivery and installation of equipment and computers to insure that air traffic controllers are working with the most sophisticated and reliable technology available. The recent installation of the HOST computer system at the FAA's Aurora Center bodes well for the FAA's progress in the Chicago area.

Yet the question persists as to whether the needed personnel and technological improvements are coming, or will be allowed to come on line quickly enough to meet the future demand throughout the country. From our perspective, the answer is no if current trends are allowed to persist. In part, the solution to upgrading the air traffic control system to work safely in the future revolves around the appropriation of funds needed to modernize and to staff the system. The ability of the FAA to provide continued professional air traffic services in the future necessitates that changes be made in the existing mechanisms and funding sources. Unless aviation priorities are freed from the unified budget process, Gramm-Rudman restrictions and Aviation Trust are no longer relegated to a secondary position relative to federal budget issues, we believe future air traffic improvements and research will be stymied.

Nor do I believe that funding alone is the solution. Also worth exploring is whether the FAA, as it is currently organized, is able to efficiently and expediently assess, plan and respond to the needs of the air transportation system. Aggressive action on aviation safety, capacity and efficiency needs require long-term, strong and consistent leadership and sustained funding, immune from conflicting external priorities, arbitrary budgetary constraints, and management pressures. We urge Congress to actively assess whether the nation's air transportation system would be more effective and safe if the FAA is privatized or established as an independent agency from the U.S. Department of Transportation.

3. NEAR-MISSES

Q. **We heard earlier today from the Office of Technology Assessment confirmation of the fact that as flights increase, so do near-misses. Should a limit be imposed by the FAA on the number of flights operated, in order to minimize the risk of a major accident?**

A. The City shares the concerns being raised over the growth in reports of near-misses occurring not only in Chicago but throughout the nation's air transportation system. We are equally concerned by what is sometimes perceived as "knee-jerk" solutions to very complex problems. Near-misses are a case in point. First, it is very difficult for an airport operator to obtain clear data on near-misses. Data we do receive is usually in the form of annual national statistics, and periodically, specific figures for Chicago. Rarely do we find a critical analysis of these figures that goes to the core of examining the cause and effect of growth in near-misses. It seems a gross over-simplification to say that as operations increase so do near-misses. What are the causal factors involved? If we do not fully understand the problem, what is the real efficacy of the solutions being offered?

In 1986, the O'Hare air space was reported to have had 4 near-misses while Midway Airport air space had 9. In contrast, O'Hare had 795,026 aircraft operations in 1986 to Midway's 211,820 operations. In using the Office of Technology Assessment's conclusion of operations being a measuring stick, one would have presumed that the number of near-misses at O'Hare and Midway would have been inverted. Instead, as an airport operator, one of the many questions I might ask relative to near-misses is what role does the mix of aircraft in and out of a given airport play. In examining the types of aircraft operations at these airports, Midway had a substantially higher volume of general aviation activity than O'Hare. Was this a contributing factor to Midway's near-misses and therefore should general aviation be banned from Midway Airport? This is as superficial a solution as capping operations is. A variety of factors must be examined to understand what is causing increases in the growth of near-misses: weather, experience of the pilots and air traffic controllers; level of equipment in the aircraft and the air traffic control tower; aircraft type; air space configurations; traffic patterns from other airports, and so forth. We must understand and examine the cause and effect relationship of these factors.

Based on our evaluations, limiting operations at Midway is clearly not the solution. We have met with the FAA to discuss concrete air safety improvements at Midway Airport. As a result, the FAA is moving forward on our request to establish an Airport Radar Service Area or ARSA for Midway. Such a designation of airspace would require that aircraft operating in and out of Midway must be equipped with transponders. It would expand the FAA's control of the activities of all aircraft over a broader area of air space around the airport, including their separation from one another, and will virtually eliminate the risk of a near-miss.

I can assure you that Chicago remains vehemently opposed to capacity constraints since they do not focus on or solve the real problems. Again, I urge Congress to insure that efforts designed to define solutions do not obviate a comprehensive understanding of the problems. I am concerned about near-misses and I am concerned about solutions that may not address the real problems. We must guard against adopting expedient policies with sweeping ramifications that may in fact create even further problems because what may work in one area may fail in another. An in-depth analysis of the nation's air transportation system is called for. Chicago stands ready, indeed volunteers, to lead such a thrust in concert with other major participants in the air transportation industry.

4. MODE C

Q. We have passed legislation to require general aviation aircraft to have Mode C transponders in areas where the FAA provides radar separation services, which you support. What types of problems will this eliminate? What other actions should be taken to improve safety around a major airport the size of O'Hare?

A. As I mentioned, we have recommended the establishment of an Airport Radar Service Area (ARSA) for Chicago Midway Airport that would require aircraft operating in and out of the Airport to be equipped with transponders. At Midway, we hope this will increase the safety factor by significantly reducing the number of near-misses. Currently all aircraft landing at O'Hare must be equipped with Mode C transponders and all aircraft within the O'Hare Terminal Control Area must have a transponder. The advantages of a Mode C transponder are clear in that they provide FAA air traffic controllers with a coded signal that not only indicates the position of an aircraft, but also its identity and altitude. We are also supportive of Traffic Alert and Collision Avoidance Systems (TCAS II) that compliment Mode C transponders requirements by generating a warning to the pilot, based on a signal transmitted by the transponder that an approaching aircraft is a threat and that evasive measures may be called for.

The City of Chicago also supports the accelerated hiring and training of additional FAA personnel to enable a greater level of inspection and monitoring of the maintenance practices and pilot training programs of every element flying in the skies.

As an airport operator, we are committed to constantly exploring new options for improving the safety and efficiency of our airports. However, the need to balance a variety of concerns, ranging from land use and environmental impacts, constrains us from planning and implementing measures that would further enhance air safety. For example, several communities surrounding O'Hare sought earnestly to have a highway built that would bisect the last remaining portion of the airport with the potential for aeronautical improvements. The highway, which ironically received serious support from the Illinois Department of Transportation, has been sharply opposed by the City, the regional office of the FAA, and U.S. DOT. While we will continue to preserve all future options at our airports, actually implementing improvements, such as replacement runways, as may be deemed necessary, may very well occur only if airport operators are given more authority and control from the Federal level. The battle between airport operators and adjacent neighbors over air traffic will continue as long as safety directed capacity improvements remain a debate rather than a mandate from Congress.

For years, the City of Chicago has had to weigh the impacts of the airport - balancing, for example, the conflict between the concerns of the 280,000 people around O'Hare impacted by aircraft noise, with the $9 billion economic impact the airport provides Chicago and the State. While we have worked diligently at identifying and implementing noise abatement measures, nothing short of closing the airport will solve or settle their disputes. Now, it is one thing to ask whether or at what point the quality of life in noise impacted communities outweighs the economic vitality of a larger geographic area. However, when does the safety of the 58 million passengers who will use O'Hare in 1987 outweigh the needs of the 280,000 residents affected by noise? These are the difficult questions that must be asked and where Congress must take a leadership role in defining the priorities.

At O'Hare, we could totally segregate general aviation from commercial aircraft by relocating a runway. We could build new runways and/or relocate existing runways that would offer new and better air safety margins. Yet, until and unless Congress declares that it is a priority, our ability to move forward and contribute to solving the strains facing the nation's air system will be severely restrained.

The CHAIRMAN. Mr. Davis.

STATEMENT OF DAVID W. DAVIS, EXECUTIVE DIRECTOR, MASSACHUSETTS PORT AUTHORITY

Mr. DAVIS. Thank you. I appreciate the opportunity to address the committee.

We are a quasi-public authority, Massport is, that owns Boston's Logan International Airport, and I have had a lot of experience with the pressures that have been brought to bear upon us by deregulation.

We are not quite the size of O'Hare, but we are the tenth largest airport in the country in terms of passengers, origins and destinations. And we do provide transportation services for a very prosperous region, which means that our traffic has grown even faster than traffic nationwide in percentage terms.

We are located in a densely populated urban center that places very real geographic and environmental constraints at Logan. And it has therefore been necessary for us to accommodate a great deal of growth without expanding our airfield capacity and without the construction of new runways or new airfield facilities.

And I think that we have become a leader in running an airport in a very constrained space. I would match our noise abatement programs against anyone. I would say that we have a very successful ground access program, because it is harder and harder to get to Logan Airport through the surface street system that surrounds the airport.

I think in noise abatement, environmental areas, and in ground access, we have been able to meet continued increases in demand for service at Logan, despite the fact that our facilities seem to be operating at or near maximum capacity.

This year, though, as Logan's passenger volume reaches 24 million, double what it was just ten years ago, we have turned our attention to the need for better management of airfield capacity. Airfield congestion and delay have become serious problems at Logan.

At peak hours, the current number of scheduled takeoffs and landings at Logan can be accommodated only under ideal wind and weather conditions. Any deterioration in weather conditions—and remember, we are talking about New England—or any significant amount of unscheduled air traffic can start a peak hour delay problem which ripples through the rest of the day.

To respond to this problem, Massport has put forth a multifaceted program designed to reduce congestion and delay at Logan and to establish the need for capacity improvements of the air traffic control system and at other regional airports.

We call our program PACE or Program for Airport Capacity Efficiency, and its most innovative component is a set of proposals for fee changes and for capacity allocation measures which we believe will significantly reduce congestion and delay at Logan without undermining the fare and route advantages which have accrued to New England air travelers under airline deregulation.

Our proposals are based on the recognition of two fundamental principles: first, we think it would be a mistake to reregulate the airline industry. Deregulation has transformed the air travel system into an inexpensive, widespread, and on the whole very safe mode of mass transportation.

With the decrease in air fares and with the rapid expansion of routes and flights, the number of Americans who use the system has grown precipitously. Under deregulation, we have all joined the jet set.

At the same time, however, our national air traffic control system and our busiest airports have not been able to adjust their rigid procedures and operations to this new environment. I think this inflexibility and lack of innovation on the part of local airports and the FAA has been the real source of rising congestion and delay problems in the deregulated era.

Deregulation freed the airlines to allocate their resources as efficiently as possible. In order to cope with the rising tide of deregulated traffic and to move the greatest number of passengers with a minimum of delay, we believe that the operators of the nation's busiest airports should now be given the same freedom to allocate their resources—the airfields—as efficiently as possible.

Second, we believe that the best policy for our operators at busy congested airports is to encourage the use of the largest, most efficient aircraft possible, especially at hours of peak demand. This is the simplest way to ensure that airfield capacity, which is a finite and a valuable resource, is used to optimal efficiency.

Such a policy allows airports to move the greatest number of passengers on a per operation basis. The proposals we are considering under our PACE program are designed to achieve this end.

As a first step, we are proposing to raise Logan's minimum landing fees to a point which more accurately reflects the cost of airfield use on a per operation basis. We are also proposing to establish a general aviation terminal fee for all non-scheduled aircraft using our new general aviation terminal.

Finally, we propose to establish a differential between peak and off-peak minimum fees. All of these fee changes will have a direct effect on the smallest, least efficient users of Logan Airport. Some small aircraft, a very few, will probably forego Logan in favor of other Boston area general aviation airports.

Some general aviation flyers will leave their private airplanes at home and travel to Logan on commuter air service. Some commuter carriers will upgrade to larger aircraft. And of course, some operators will simply move their flights to off-peak hours.

Taken together, these changes of usage patterns at Logan should reduce overall traffic by up to five percent, yielding a much greater decrease in delay, especially at peak hours. And I will show you some of that in a few minutes.

We must recognize, however, that this set of fee-based changes will not be sufficient to the task of managing delay at Logan Airport. Massport is therefore proposing that we work with other public and private actors in the aviation industry to establish what we are calling a priority reservation system at Logan.

During peak hours, this system would determine an optimal number of allowable operations—both takeoffs and landings—and would then assign those operations on the basis of the number of seats per aircraft. Under this system, some reservations would be held aside from the seat allocation system and auctioned for cash, thus preserving the right of anybody to gain access during peak hours.

All of us at Massport recognize that our proposals represent a departure from the old "first come, first served" philosophy which has traditionally characterized air traffic operations. We are confident, however, that the PACE program offers a realistic and practical way to reduce congestion and delay at Logan without interfering with the right of the FAA to control air traffic.

It will still, obviously, be responsible for planes coming in and out, for flow control, et cetera. PACE will not exclude or eliminate any class of aircraft from Logan, although it will promote efficiency and end subsidies. PACE will foster the smooth flow of interstate commerce by providing for the maximum peak hour throughput of passengers with a minimum of delay.

And although every airport has unique characteristics and circumstances, PACE might offer some useful guidelines for delay reductions at other congested airfields. I think the most radical feature, frankly, of PACE is that it acknowledges, as present air traffic management schemes do not, that there is a difference between a scheduled 747 carrying 400 passengers and an unscheduled Cessna carrying four.

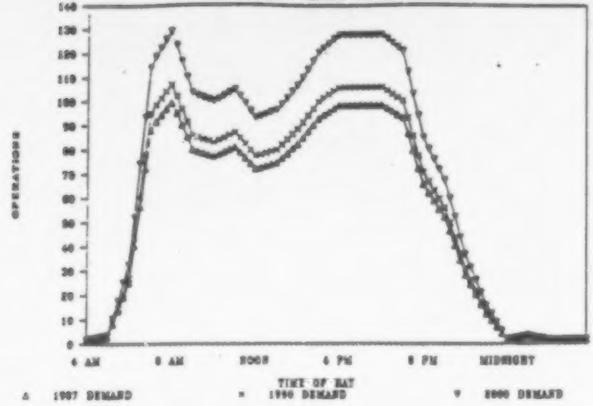
In a deregulated era, this simple recognition of reality can make an enormous difference in the efficiency of our national air transportation system.

Now, I have taken the liberty of including a few charts and graphs to try to illustrate some of my points.

[The charts follow:]

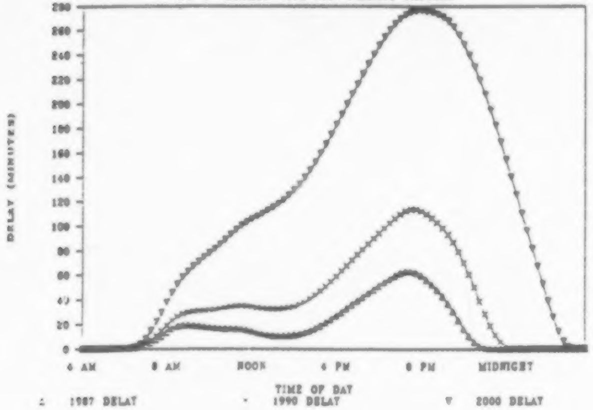
FAA OPERATIONS DEMAND FORECAST BY HOUR

WITH 1987 PEAKING PATTERN



DELAYS FROM PROJECTED OPERATIONS LEVELS

IFR-1 WEATHER WITH 1987 PEAKING PATTERN

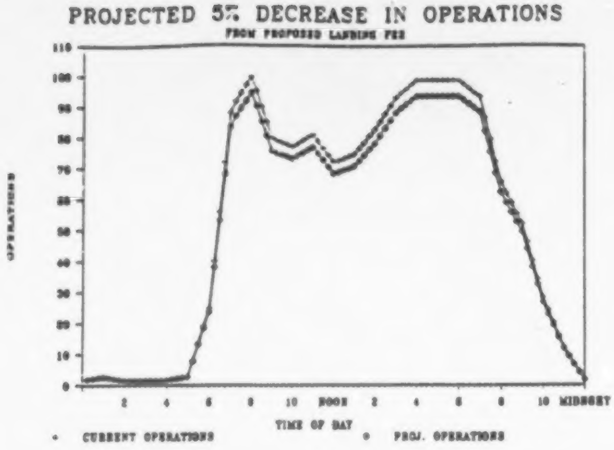


COMPARISON OF DELAYS IN IFR-1 WEATHER:

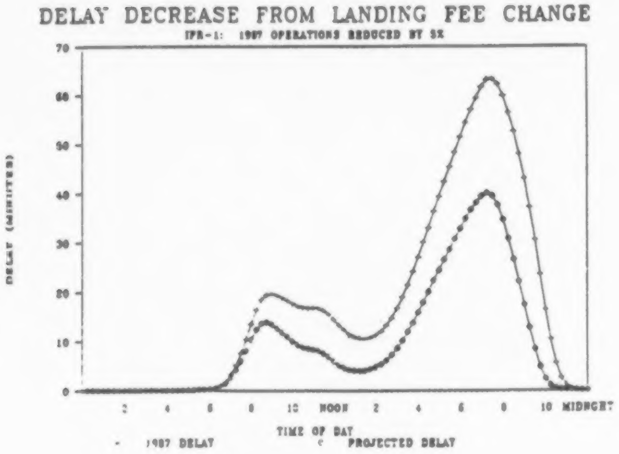
	CURRENT OPERATIONS AND CURRENT PEAKS (MINUTES)	OPERATIONS IN 1990* WITH CURRENT PEAKS (MINUTES)	OPERATIONS IN 2000* WITH CURRENT PEAKS (MINUTES)
TOTAL DELAY THROUGHOUT DAY	34,204	74,318	252,843
AVERAGE DELAY PER AIRCRAFT	26	52	147 (2 HRS 27 MIN)
DELAY EXPERIENCED BY MOST DELAYED AIRCRAFT	64	114	276 (4 HRS 36 MIN)
PERCENT OF TOTAL AIRCRAFT DELAYED MORE THAN:			
5 MINUTES	81%	92%	95%
10 MINUTES	69%	87%	94%
15 MINUTES	58%	82%	92%
20 MINUTES	50%	78%	91%

NOTE: DELAY FIGURES INCLUDED ALL AIRCRAFT TAKING OFF OR LANDING IN AN AVERAGE SUMMER WEEKDAY. IFR-1 WEATHERIS ASSUMED TO LAST THROUGHOUT ENTIRE DAY.

*PROJECTIONS FROM FAA AVIATION FORECASTS



PROJECTED 5% DECREASE IN OPERATIONS
FROM PROPOSED LANDING FEE



DELAY DECREASE FROM LANDING FEE CHANGE
IFR-1: 1987 OPERATIONS REDUCED BY 5%

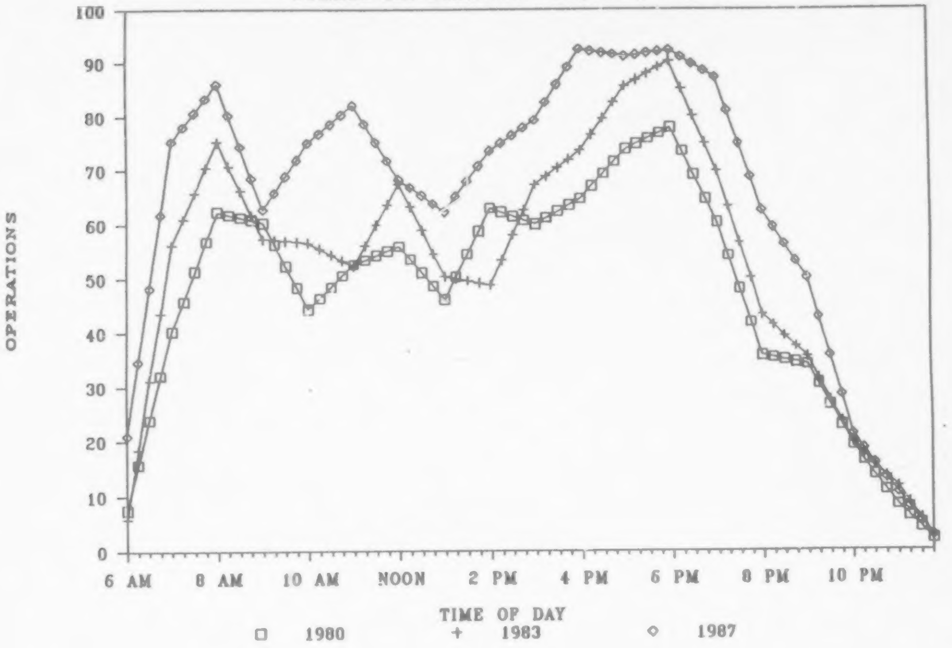
COMPARISON OF DELAYS IN IFR-1 WEATHER:

	CURRENT OPERATIONS AND CURRENT PEAKS (MINUTES)	DECREASED OPERATIONS DUE TO NEW LANDING FEE STRUCTURE (MINUTES)	PERCENT DECREASE IN DELAY
TOTAL DELAY THROUGHOUT DAY	34,204	18,735	45%
AVERAGE DELAY PER AIRCRAFT	26	15	42%
DELAY EXPERIENCED BY MOST DELAYED AIRCRAFT	64	40	38%
PERCENT OF TOTAL AIRCRAFT DELAYED MORE THAN:			
5 MINUTES	81%	67%	
10 MINUTES	68%	50%	
15 MINUTES	58%	38%	
20 MINUTES	50%	30%	

NOTE: DELAY FIGURES INCLUDED ALL AIRCRAFT TAKING OFF OR LANDING IN AN AVERAGE SUMMER WEEKDAY. IFR-1 WEATHER ASSUMED TO LAST THROUGHOUT ENTIRE DAY.

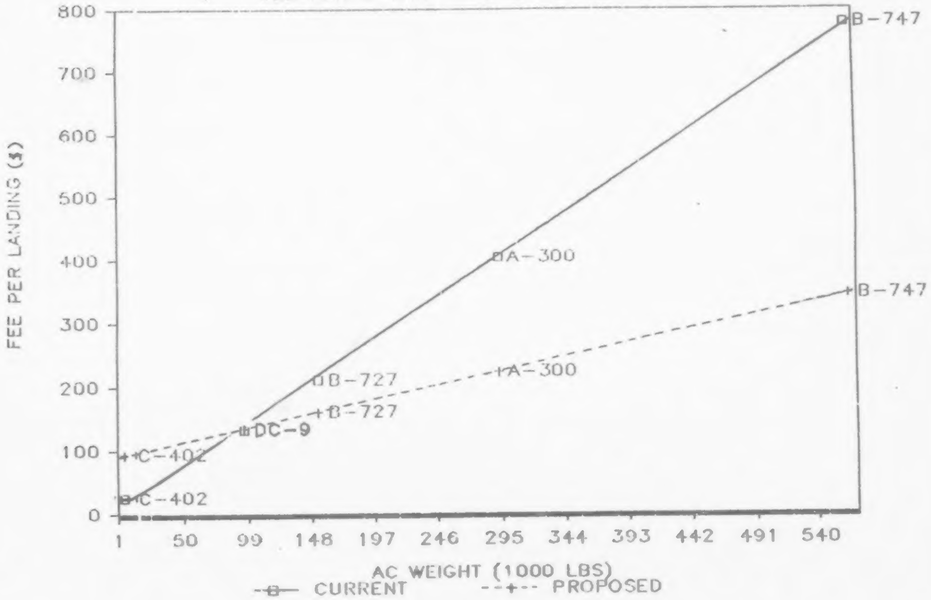
PEAKS IN OPERATIONS AT LOGAN

SUMMER DAY SCHEDULE: 1980, 1983, 1987



PRESENT LANDING FEE VS PROPOSED FEE

FEE PER LANDING FOR SELECTED AIRCRAFT



Mr. DAVIS. If you would turn to the first chart, you will see what the current peak hour patterns at Logan are compared to the recent past, and you can see that the peaking is getting quite a bit worse.

The top line on the chart is obviously 1987. The line marked with the little squares is 1983, and the middle line generally speaking is 1980—1980 for the lower line and 1983 for the middle line.

What does this mean in the future? Well, I have charted some FAA operations or projections of demand forecast by the hour. On the top chart you see on the next page what the demand looks like, but the chart just below that is what the delay looks like.

And look how it rolls forward. We think we are very congested today. Look how small that line of 1987 looks against the projection for the year 2000, without anything being done to manage the airfield. It is a startling difference.

A five percent decrease in flights does not seem like very much, but take a look at the next chart. Here we see at the top chart a reduction of five percent in the numbers of operations, and down below it you see the reduction in delays that result from that modest reduction in operations.

And you will see it runs about a 40 percent reduction in delays. Five percent in terms of capacity becomes a very big number when you are talking about delay.

And then, although it does not really deal with what I have said today, the scenario—one of the scenarios that we are looking at would result in a landing fee system that would look more like the dotted line on the chart on the last page than the solid line.

Obviously, relatively speaking, larger planes would pay somewhat less than they are today, although still more than the smaller aircraft.

The CHAIRMAN. Mr. Davis, you bring in a very important issue. It is fundamental, and I guess we are going to have to get someone from general aviation to read your testimony and then come back up here.

Mr. DAVIS. I assure you, sir, a number of people from general aviation have read my testimony, and I understand the differences we have. I am filled with trepidation in speaking to you, sir.

The CHAIRMAN. Well, what you do is forego general aviation, because, as you say, you finally get to it at the bottom. I was going to ask the question, but you make the statement.

I want to yield to our colleague here from Massachusetts, but to get right to the point. Is the airport for a 747 carrying 400 passengers rather than an unscheduled Cessna carrying four.

Question: Should that airport facility be available for general aviation? The economics, as you indicate by that statement, are going to force general aviation to abandon Logan, and now I even wonder about the commuter.

I used to go up there, and I knew all the little places to weave and turn to get around that place, to get to Air Vermont, to go up the line to Berlin and Manchester and all those other little towns.

Now you are going to forego Logan as my connector to get up to the New Hampshire primary.

Mr. DAVIS. Sir, I could not do that. We have other interests.

The CHAIRMAN. Maybe that will save the country. Maybe we want to put that in in a hurry.

Is that your idea? It should be tested here in public testimony, and we ought to have a counter to it to see, because what you do is really dispose of general aviation's use of Logan.

Mr. DAVIS. Sir, first of all, we would not under any stretch of the imagination ban general aviation at Logan, but we would impose a price structure that I think really represents recovery of actual costs, and I think that that price structure would be very much less attractive to smaller general aviation flights.

It is easier to do this, sir, with the existence of Hanscom Field, for example, which is also a Massport property, which is about 15 miles from center city Boston and which we have taken pains to equip very completely and provide a first rate airport for general aviation in the region.

The CHAIRMAN. We have a roll call here now, Mr. Davis. I want to thank you both.

I am going to stick with you until that last bell.

We now have one of the most effective members of our own committee, your own Senator from Massachusetts. Let me yield to him.

Senator KERRY. Thank you, Mr. Chairman. I appreciate that. Can we get that on film? I could use that.

I am delighted to welcome both members of the panel. Obviously Dave Davis is a good friend, and I have worked very closely with him on a number of different issues in our transportation grid in Massachusetts.

Let me just ask you, Dave, if I can, how do you make the argument that this is not effectively a ban on general aviation? I would just like you to elucidate on that a little bit.

Mr. DAVIS. Because if the price is right, the space will be available. But let me talk about it. There is some seductiveness in an absolute ban. Let me give you a circumstance that you might be interested in when you are talking about delay.

I think delay has become very worrisome to travelers today. If for some reason I could snap my fingers and say no aircraft at Logan during peak hours—just during peak hours, not during the rest of the day—with 20 seats or less, just eliminate them? I am not proposing to do that, but if we could do that, what would happen?

What would happen is that 100 to 200 people an hour would be somewhat inconvenienced because they would either have to find larger aircraft or whatever.

What would also happen is 7,000 people an hour would be convenienced, and during IFR weather we would be convenienced by taking an hour less in terms of delay. It is an interesting comparison and an important one, I think, to think about.

I think, sir, we have to think about because we have to think about Logan and probably a number of airports across the country as modern mass transportation centers. I think they are going to be difficult to expand, so we better make them work as efficiently as we can.

The specific answer to your question is, of course, under the fee structure that we are paying, if a business aviation aircraft wants to pay the fee, fine. They can come in. Indeed, we will make some provisions for service to areas whose market cannot support larger aircraft.

Senator KERRY. That was my next question.

Mr. DAVIS. We will have some essential service provisions in our rulemaking.

Senator KERRY. Would that be tuned somehow also to the whole regional carrier concept?

Mr. DAVIS. Exactly.

Senator KERRY. It is inherent in that statement that the regional carriers obviously have less ability to support it, but I am wondering if it is going to go beyond the economic piece of it and look at just the need to have the service as well.

Mr. DAVIS. Absolutely. We are very much aware, for example, that the airport on the cape at Provincetown has a short runway that cannot be expanded because of environmental concerns. It is in the National Seashore.

We will have to provide some special arrangement for service from that airport because there is no possibility that they will be able to upsize the size of the commuter aircraft going to that location. We will do that.

At the same time, with 14 or 15 very small airplane flights from, say, Manchester each day in less than 20-place airplanes, one wonders why there could not be a slightly fewer number of flights in 40-place airplanes.

Senator KERRY. My last question to you——

The CHAIRMAN. Mr. Hord, did you want to comment on that?

Mr. HORD. There is just one point I would like to make that is coming out as a result of this testimony. It appears that there is evidence with our testimony that trying to regulate from a national basis access or egress to airports is virtually impossible.

What is being requested here is a right for a local airport to regulate their own environment through a cost structure. What I am proposing is that I rid my airport of a regulation on a high density rule that is inappropriately placed there also.

So I guess the point that I am trying to make is that the free market system, the point that I made earlier, ought to be brought to bear, and that the funds that are available through the trust fund ought to be directed to allow each of us to do what is necessary to satisfy air transportation in our own regions.

Senator KERRY. I have just one last question because we imminently will get the bells for this vote and we have to go.

I wonder, the House version of the bill has the Schuster Amendment on it, which has a required FAA constraint program for 50 or so airports in the country.

Do you think that the Massport plan is a better alternative, reasonable alternative, and how would you compare the two?

Mr. DAVIS. At the risk of sounding provincial, I think that the Schuster Amendment could be improved, I guess is the way to say it.

The Schuster Amendment does not provide any mechanism to make the air field work more efficiently. It just, in a sense, slots the airfield.

The Schuster Amendment does not say how these slots might be manipulated.

I strongly believe that the reservations that we propose here are public goods, and I do not know if they belong to the airport operator or the FAA or to both of us, but it is offensive to me, frankly, from a public policy standpoint, to see those slots—which were acquired by the airlines at no cost—being bought and sold for millions and millions of dollars.

I guess it would not be surprising for me to say that I think the Massport plan is somewhat better, but I am willing to try to improve the Schuster Amendment.

Senator **KERRY**. I thank you very much.

I think the Chairman's recommendation about limiting the visits to New Hampshire would be the best thing that Michael Dukakis could get going.

Do I need to ask the governor if he supports that?

The **CHAIRMAN**. Well, both of you gentlemen have really given us some valuable insight, and we are going to have to embellish upon it.

We thank you now because we have to make that roll call, but we will have some questions for the record that we can submit, if you do not mind.

Thank you both very much.

[Whereupon, at 12:35 p.m., the hearing was adjourned.]

[The following information was subsequently received for the record:]

QUESTIONS OF THE CHAIRMAN AND THE ANSWERS

CAPACITY LIMITATIONS

Question. We are commonly told that we must spend more money to expand capacity. Now, you are telling us that that can't be done in Boston and that existing capacity must be reallocated. Why should we allow each airport to develop its own proposals for determining who should be allowed access to an airport?

Answer. Massport's PACE program (the Program for Airport Capacity Efficiency) embraces several ideas for expanding airport capacity for the New England region—our proposals for eliminating subsidies for smaller aircraft and developing an efficient allocation mechanism form only part of our overall plan.

From the first announcement of our plans (August 27, 1987), we have advocated a number of different ways to meet New England's growing demand for transportation services. In addition to our proposal to change Logan's fee structure, which is first and foremost an attempt to more equitably and accurately allocate airfield costs, and our proposal to develop a peak hour allocation mechanism, we have also called for the further development of those regional airports which already have some jet service, and have the potential to handle even more. These airports—which include Worcester, MA, Manchester, NH, Portland, ME, and Providence, RI—are located in markets which are enjoying rapid growth. Each has the potential to provide air service to major hubs throughout the national system. As each of these airports begins to more fully address the needs of its own immediate market area, we can expect some easing of the current pressure on Logan to absorb all of the region's air demand. At the same time, Massport heartily endorses the concept of a high speed rail link from New York to Boston. This well-researched and planned transportation proposal would employ proven rolling stock technologies to reduce the downtown-to-downtown travel time from Boston to New York to levels which would be competitive with peak-hour jet travel and ground link travel times. Nearly one quarter of Logan's current air traffic is bound to and from the New York area, making Boston to New York the busiest air route in the nation. High-speed rail could thus play a significant role in easing congestion not only at Logan, but also at La Guardia.

In addition to expanding regional airports and developing high-speed rail, Massport has also suggested that U.S. DOT and the FAA work with the Department of Defense to examine the potential for civil air service at surplus or under-utilized military airfields. Here in New England, there are several military installations which seem likely candidates for development as joint use fields, or perhaps ultimately as major "second airports." One particularly intriguing possibility in Massachusetts is Ft. Devens, which is located on the rim of the Boston metro area along one of our major beltways (Route 495).

The PACE plan thus embraces a number of responsible, environmentally sound ways to expand regional airport capacity. I would like to stress, however, that each of these alternaties is only a partial solution. We will need to pursue all of them—and more—in order to meet projected demand. We must also recognize that even the most optimistic timetables for these projects cannot offer an immediate solution to the congestion and delay problem at Logan.

In order to provide short-term relief, some interests have suggested that we construct new runways at Logan, thus creating additional capacity. The problem with this suggestion is that it completely ignores the fact that Logan is located at the heart of a densely populated urban area which has suffered heavily from the historic growth of both the airport and of jet traffic. A new runway as last proposed was in the early 1970's (in the Republican administration of Gov. Francis Sargent). The environmental and political furor which followed resulted in a court decision tantamount to an injunction against construction of the new runway, the firing of the then-Executive Director, and the decision by the Massport Board to accommodate growth within the airport's existing physical boundaries and runway configuration. The strategy has worked, and Logan has more than doubled its passenger volume since 1975, proving that new runways aren't the only way to improve airport throughput.

Since the current high level of opposition to new runway construction at Logan is very unlikely to abate in the foreseeable future, Massport must seek to improve the use of its existing airside facilities. To do this, we need to change our measure of peak hour efficiency from the number of *aircraft* that can be accommodated to the number of *people* that can be accommodated at the airport with a minimum of predictable delay.

For these reasons, our PACE program contains proposals not only to expand the capacity of our regional airport system, but also to make more efficient use of capacity at Logan. No one of our proposals offers complete relief—they must be seen as a unified program, And, since none of the other alternatives offers *immediate* relief, our fee and capacity proposals for Logan are necessary to our efforts to make immediate progress in meeting regional air transportation needs.

With respect to your question regarding an airport's proposal for determining access to its landing field, the PACE proposals are not intended to and would not give Massport the right to determine who should be access to an airport. Under the proposal to adjust the minimum landing fee at Logan, the landing fee would provide a fair system of allocating the costs of constructing, operating and maintaining the Logan landing field. The new landing fee would eliminate the subsidy which now exists for lighter aircraft. It would be uniformly applied without discrimination as to any aircraft: Each aircraft would be required to pay its fair share of the costs of the landing field.

The longer range PACE peak hour fee proposals, likewise, would be fee based; therefore, no aircraft would be denied access to Logan. The fee would be adjusted so that during the congested peak hours a decision to use Logan would be based on economic incentives, not on airport regulation. Such fees would be the best solution for encouraging more efficient utilization of Logan capacity in keeping with the philosophy underlying of the deregulation of the airline industry.

Assuming that something must be done soon to handle the unparalleled airport congestion currently being experienced, the Massport peak hour fee proposals are the only method short of federal re-regulation to address the congestion. Of the three alternatives for dealing with today's congestion: doing nothing, federal regulation and appropriate airport fee incentives, the last, in Massport's view, is the best solution to maintain the gains for consumers that have resulted from deregulation. Further, the proposed peak-hour fees are consistent with the federal laws regarding reasonable access to airports by all aircraft without unjust discrimination.

PRICING PROPOSAL

Question. What Federal legislation would you need to implement your pricing proposal?

Answer. Under present federal law, airports have the right to set landing fees in order to recover their costs of operating their terminals and landing fields. Traditionally, the determination of landing fees have been the decision of the individual airport operators, provided that the fees are reasonable, do not exceed the actual costs of the landing field and are not unjustly discriminatory. The proposed change in the Logan's minimum landing fee has two components: (a) a flat rate per landing applicable equally to every aircraft that lands at Logan and (b) a rate based on the weight of the aircraft. The proposed minimum fee would be solely based upon cost recovery; Massport would not profit from the fee. Since the fee would be based upon a reasonable cost allocation and is only designed to recover the costs of the airfield, it is appropriate under current federal law.

The long-range proposed PACE peak hour fees are within the airport proprietor's right to set reasonable landing fees. Current federal law prohibits a landing fee that discriminates against or unduly burdens interstate commerce. Since the long range peak hour fees would be applied equally to intrastate and interstate travelling aircraft and would be based upon the need to maximize Logan's capacity, the fees would be allowable under existing federal law. Some opponents argue to the contrary, that the peak hour fee proposals violate various federal laws. Massport would support any new legislation to the extent that it may be necessary to clarify an airport proprietor's right to set reasonable, non-discriminatory airport landing fees that do not unduly burden interstate commerce.

Question. Your plan will obviously force out all general aviation aircraft and many smaller commuters from Logan Airport. If it is adopted, what will happen to service to the smaller communities that these aircraft commonly serves?

Answer. The PACE plan is not intended to bar or ban any particular class of aircraft from Logan airport. With respect to the minimum fee, the reason for it is to more fairly allocate the impact of landing fees. In 1984, when Massport raised minimum landing fees at Logan from $5 to $25, we were told by general aviation and commuter carriers alike that it would eliminate commuter aircraft access to the regional air transportation system. Private planes, we were told, would no longer be able to use Logan airport. Commuter passengers, so we heard, would have to pay far more for drastically reduced service.

Of course, none of these dire predictions came to pass. Our modest fee increase was, in fact, a long overdue response to the changing costs of airfield operations, and served to reduce—but by no means eliminate—operating subsidies enjoyed by these aircraft.

Even in 1984, Massport was highly sensitive to the potential impact of fee increases on essential air service. In establishing a $25 minimum landing fee, Massport also provided an exemption program for up to four flights a day from communities which were served by only one carrier. Surprisingly, carriers serving only about a third of the eligible routes asked for exemptions. Still, over 7500 hundred flights throughout the New England region were granted—and continue to receive—exemptions from the $25 fee.

In our PACE document (dated 12/11/87), we clearly stated our intention to develop an exemption plan with regard to PACE-related fees which would be similar in both intent and scope to our current exemption program. The exemption program will assure reasonable access to Logan for all commuter operations. Massport is committed to working with the regional cummuter airlines to insure that essential air service is maintained.

Although the minimum fee is designed to be a better cost allocation method, it should also have a beneficial effect on service to Logan. We will remain sensitive to the needs of air markets which cannot support larger, more efficient commuter aircraft, or which are served by a single carrier. We believe, however, that there are numerous markets in New England which cannot only justify larger aircraft, but will actually benefit from the change to planes which offer such desirable safety and comfort features as larger cabin areas, co-pilots, and restrooms.

In other markets around the country, these larger aircraft actually increase the size of the market, since passengers prefer them to so-called "puddle-jumpers." We do not, therefore, see the PACE plan as diverting commuter traffic. Through upsizing, moving operations off-peak, and through a judicious and appropriate exemption program, we are confident that scheduled commuter air service at Logan will be improved and will benefit from the general reduction in congestion and delay which the PACE plan is designed to achieve.

By eliminating the current subsidy for smaller aircraft, the proposed minimum landing fee will increase the costs to general aviation aircraft. Should such aircraft choose not to use Logan, there are several excellent local general aviation airports available. For instance, Hanscom Field (which is owned by Massport) is within 12 miles of downtown Boston and is located in the heart of greater Boston's high technology industry. It is in fact closer to downtown than most large metropolitan airports. There is no landing fee at Hanscom Field.

We believe that the major effect of our proposals on general aviation activity will be to discourage trips from within a one hundred and fifty mile radius, especially from airports which already offer ample commuter service.

Up to 40 percent of Logan's current general aviation traffic falls into this category. Reduced use of private, unscheduled aircraft for these trips would provide a substantial relief from congestion and delay for passengers using Logan.

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

STATEMENT OF THE AIR TRANSPORT ASSOCIATION OF AMERICA

Almost a decade after Congress decided to unfetter the domestic operations of the airline industry from 40 years of intense governmental economic regulation and thereby confer enormous benefits upon consumers, some public and private observers of the industry have begun to express misgivings about the results of the decision. They believe that a "malaise" afflicts deregulation. These observers have concluded that a selective return to governmental economic regulation of the industry would be therapeutic. We disagree. Free competition has provided more benefits to more travelers and shippers than governmental regulation did or could. Any retreat from the principles of airline deregulation will be purchased at the expense of the travelling and shipping public.

The proponents of deregulation correctly concluded ten years ago that dismantling the federal economic regulatory structure would permit competition to direct the development of the nation's air transportation system and that consumers would realize, in contrast to the uniform fares and services that are characteristic of regulation, a burgeoning of price and service options as a consequence of that release of competitive forces. The ways in which the development has occurred have often been surprising. That lack of foreseeability is highly instructive, both because it reveals the creative energies that regulation had so thoroughly suppressed and because it warns against canalizing those now-released energies through any form of re-regulation.

The most repeated criticism today of the airline industry is that as a consequence of deregulation service has deteriorated. Airline service certainly has changed in the last decade. However, a dispassionate observer would note that the variety and availability of airline service have expanded significantly, and that the fares and rates charged for those services since deregulation have been a better bargain for most consumers than they ever were before deregulation.

Airline service is not without its shortcomings. Some of those shortcomings are attributable to the airlines but some are attributable to governmental policies, especially those of the Federal Government. Airlines have been expending great efforts on improving the quality of the services that they offer to the public. The Department of Transportation's recently released consumer report for October indicates that their efforts are producing notable improvements. According to that report, overall domestic system flight performance improved from a 77 percent on-time arrival rate in September to a rate exceeding 80 percent in October.

As we discuss more fully below, governmental policies appear less susceptible to such rapid improvement. In particular, chronic capacity deficiencies afflict the air traffic control and airport systems. Those deficiencies must be corrected if the full promise of deregulation is to be realized. We suspect, however, that much of the recent criticism of airline service is not prompted primarily by either industry or governmental shortcomings. Rather, many critics seem to be complaining about the change in the nature of air travel. In the past decade it has been transformed into a service that is well within the reach of the average American. Air transportation in this country, now more than ever, is a public convenience. Democratization of air transportation appears to be unsettling to a few, although not those millions of Americans who have benefitted from the broadening of travel opportunities that competition in our industry has conferred upon them.

The free marketplace is obviously far from placid. The release of competitive forces, coupled with other occurrences, such as the PATCO strike, have made for an extraordinarily eventful decade for the airline industry. Many of the most important marketing developments of that period—the growth of hub-and-spoke service, the proliferation of discount fares, the institution of frequent flyer programs, and the increased importance of travel agents—were either unknown or only nascent ten years ago. Their development provides an important lesson for all who are interested in the airline industry: Competitive forces in our industry yield results that cannot be precisely foreseen. What is predictable, however, is that governmental efforts to regulate the economic elements of the airline industry will prevent or deflect innovation. Consumers ultimately bear the costs of the frustration of innovation that regulation causes, in the form of increased fares, constrained services and forgone innovation.

To place the debate about airline deregulation within a useful perspective, we believe that is worthwhile to review the policy objectives that Congress expressed in the Airline Deregulation Act of 1978 and compare the performance of the airline industry with those objectives. The Deregulation Act's objectives are included in the Declaration of Policy of the Federal Aviation Act, which is contained in section 102 of that Act. Their inclusion necessitated amending the policy statement in section 102 that had its origins in the Civil Aeronautics Act of 1938, which initiated the comprehensive economic regulation of the airline industry.

In the section 102 policy statement, Congress unmistakably established that safety was to be accorded the highest priority in air commerce and that every feasible safeguard should be adopted to prevent any deterioration in existing safety procedures. Next, Congress called for a variety of adequate, economic, efficient and low-price services by air carriers and foreign air carriers.

In a fundamental change to the then-existing policy statement, Congress in 1978 also mandated the placement of maximum reliance on competitive market forces and on acutal and potential competition to provide the needed air transportation system. Amplifying this thought, Congress called for the encouragement, development and maintenance of an air transportation system relying on actual and potential competition to provide efficiency, innovation, and low prices, and to determine the variety, quality, and price of air transportation services.

Congress also ordered that unreasonable industry concentration, excessive market domination, and monopoly power be avoided. In furtherance of that objective, Congress called for the encouragement of entry into air transportation markets by new air carriers as well as the encouragement of entry into additional air transportation markets by existing air carriers.

As this review indicates, the policy statement changes evidenced a Congressional intention that airline service be afforded safely to more people more economically. How has our industry measured up to that charge? We believe that the industry has fulfilled the objectives of Congress remarkably well.

Of paramount importance in evaluating the industry's performance since deregulation is the fact that the airline industry began its safest era in 1978. Long fatality-free periods have been recorded since then, despite substantial increases in operations and passengers flown. Quite clearly, deregulation has not meant a diminution of airline safety.

Several recent accidents have concentrated renewed public attention on airline safety. Despite those tragic accidents, over the past 50 years there were only six other years which had a better safety rate than 1987. Indeed, until the recent Northwest accident at Detroit, the major U.S. airlines had operated for nearly two years without a fatal accident. During that time they flew close to 12 million flights and carried almost 800 million passengers in complete safety. That record reflects a safe system. Airlines simply could not have performed that many operations without a fatal accident if their operations suffered from inattention to safety.

We do not pretend that we have achieved perfection in our operations but we do consistently demonstrate a firm commitment to achieving the highest degree of safety. Despite that genuine and obvious commitment, critics deprecate our efforts. In particular, they assert that the "margin of safety" that existed under regulation has diminished because airlines are now forced as a consequence of competitive pressures to be less vigilant in their maintenance and operational activities. That assertion is wrong; no empirical evidence exists to support it. Indeed, it represents an instance where people take unwarranted comfort from the mere existence of economic regulation instead of examining pertinent data.

One element of the "margin-of-safety" critique is that maintenance expenditures are a smaller proportion of airline budgets than they were at the outset of deregulation. Maintenance was 12.2 percent of total operating expenditures in 1978, whereas they were 11.2 percent of such expenditures in 1986. The one percentage point difference in aggregate maintenance expenditures is sometimes cited—quite mistakenly—as evidence that safety in the airline industry has diminished. Commercial aircraft today are far more reliable than previous generations of aircraft. Technological improvements have made aircraft far easier to inspect and maintain. Finally, a diminution in the rate of increase of maintenance work-force compensation has occurred during this decade. Taken together, these factors have resulted in maintenance functions being performed more efficiently than in past years. Thus, the cost of keeping modern aircraft airborne has moderated. That moderation cannot be interpreted as a reduction in attention to safety. Indeed, industry maintenance expenditures increased by $1 billion between 1985 and 1986.

The Federal Aviation Administration mandates that airlines follow detailed maintenance requirements. Airlines adhere to those requirements. Over the last few years some airlines have paid civil penalties for maintenance-related violations. Many of these penalties have been for recordkeeping deficiencies. Shortcomings in documenting maintenance activities are serious but are not the same as failing to maintain aircraft properly. In any event, it is the industry's view that these kinds of mistakes should be corrected as quickly as they are discovered.

The airlines take safety seriously and the flying public realizes that undeniable fact. Were travelers not confident about our safety practices, our industry would not have experienced the growth it has since deregulation.

Airlines have become the mode of choice for those seeking public intercity transportation. In achieving that status, we have enjoyed a tremendous growth in passenger traffic—ten percent per year for the last two years. Our annual traffic has increased from a level of 275 million passengers in 1978 to a level of 418 million passengers in 1986, and we have set new traffic records for the last four consecutive years. We anticipate that we will carry 450 million passengers this year.

According to the most recent Gallup survey, 54 million adults—32 percent of our adult population—took airline trips in 1986. That far surpassed the previous record of 48 million or 28 percent of the adult population, which was set in 1985. Seventy-two percent of adult Americans now have flown at least once in their lifetime. The increasing numbers of Americans who have flown reflects a profound recent change in our industry: a majority of our passengers are pleasure travelers rather than business travelers. Fifty-four percent of the trips taken in 1986 were for pleasure purposes and 46 percent were for business purposes, which is a reversal of the 1978 pleasure-to-business traveler ratio. The average air traveler in our country made 3.2 round-trips last year.

U.S. airlines are operating 6.6 million flights annually, which means that every day they perform over 18,000 flights. Airlines carry over 1.2 million passengers per day, which is 63 percent greater than the 752,000 passengers that airlines carried daily in 1978. If you average our 1987 experience, one of our aircraft now takes off every 4.8 seconds carrying 67 passengers bound for their chosen destinations.

The Congressional objective of providing consumers with lower fares has been achieved. We estimate that because of the widespread availability of discount fares, domestic passengers realized more than $3 billion in savings last year as compared to the previous year. Ninety percent of our airline passengers used some form of reduced fare in 1986, and the average depth of the discount was about 60 percent. The average air fare dropped 7.8 percent last year, the largest drop ever. This is not merely a one-year phenomenon. Significant fare benefits have been characteristic of the public's experience since the onset of deregulation. For example, the Brookings Institution has concluded that deregulation has meant an annual savings for consumers of $5.7 billion, as measured in 1977 dollars. If you translate that into 1986 dollars, that comes to over $10.2 billion in annual savings for consumers. Of that, Brookings concluded that one-third, or over $3 billion in 1986 dollars, is attributable to fares, (as ATA has also estimated), but the other two-thirds, almost $7 billion, flows from consumers' savings resulting from service improvements, most notably in the form of increased frequencies.

The Congressional objective of encouraging new entries has had mixed results. In the first years after deregulation, there was a remarkable blossoming of newly certificated carriers, but in recent months, there has been a return to a level of concentration rather similar to that which existed before deregulation. This matter deserves careful analysis. Only a few of the newly certificated carriers ever provided a significant proportion of total airline service. Although some new entrants have left the scene, it is important to remember that Congress intended not only to encourage entry into air transportation markets by new air carriers, it also encouraged the entry of existing air carriers into additional air transportation markets. That process continues unabated.

In response to apprehension that freedom of market entry and exit portended wholesale abandonment of airline service to small communities, Congress included in the Deregulation Act a ten-year program to safeguard against loss of service to those communities. That program, which is known as the Essential Air Service Program, guarantees any community that was served or authorized to be served by a certificated carrier on the October 24, 1978 date of enactment of the Act an appropriate level of service, with the assistance of subsidies if necessary. We support the pending renewal of the EAS program.

In addition to assuring that small communities continued to receive service, the EAS program was designed to encourage the more efficient provision of that service. Until 1978, small communities were receiving subsidized air service from local service carriers under the section 406 subsidy program. That program, which had begun decades earlier as the Federal Government's air-mail subsidy program, was by the mid-1970s generally regarded as unsatisfactory. It spawned a system in which local service carriers flew jet and turboprop aircraft, which were typically far too large for the markets that they served, at times and with frequencies that often only minimally benefitted communities. The effect of the section 406 program was that the Treasury expended relatively large sums of money to provide subsidized service that, on the whole, was clearly inadequate. In turn, increasing federal subsidy expenditures placed great pressure on the Civil Aeronautics Board, the federal agency that administered the program, to suspend or delete service to communities that generated few passengers.

The EAS program corrected that unsatisfactory situation. It did so by permitting commuter airlines to receive subsidies to serve small communities, which was something that section 406 did not allow. Consequently, appropriately sized aircraft now serve subsidized markets. This has meant service that is both more economic and frequent than that which small communities were provided before 1978.

Now let us go back to focus more closely on the element which has had the greatest impact in making airlines service available to the average American: affordable air fares.

Deregulation has produced more efficient airline operations, particularly with the widespread use of hub-and-spoke patterns of service. The result is that airlines operate aircraft far more appropriately sized to the markets that they serve, more hours during the day, and at higher average load factors. The old habit of flying some segments of a linear route with largely empty aircraft has been eliminated. We now see a system-wide average load factor well over 60 percent, which was unheard of in the days of regulation. A hub-and-spoke operation offers far more destinations to the embarking air traveler, whether the point of embarkation is a small community or large city, and this, in turn, helps fill aircraft.

Nearly all analysts conclude that the two major contributors to reduced prices in the airline industry have been moderated labor and fuel costs. The historically spiraling labor costs of U.S. airlines have reached a plateau, and held there, as a consequence of the competitive forces that deregulation unfettered. New entrants were able to hire their work forces at market rates and this compelled the incumbent carriers to introduce a second so-called "B-scale" of wages in order to meet the competition. The competitive environment also demanded more flexible work rules, with consequent productivity gains complementing those flowing from the airlines' investment in aircraft more suitable for their markets and schedules.

The average price per gallon of jet fuel in the United States fell from 81 cents in 1985 to 56 cents in 1986. (It had increased to 50 cents per gallon by August 1987.) Because every one cent drop in the cost of jet fuel means a saving of $130 million for our industry, jet fuel alone accounted for $3 billion in cost savings in 1986. From the consumer's point of view, the high level of competition meant that those cost savings were passed on by the airlines to him or her in the form of reduced fares.

Congress in its Declaration of Policy also sought to encourage adequate profits for efficient and well-managed carriers. There have, of course, been some remarkable success stories. Nevertheless, the profit picture for the industry as a whole continues to by cyclical. Our industry has been very sensitive to slowdowns in the economy and this has continued to be the case since deregulation. For example, during the 1982 recession U.S. airlines suffered operating losses totalling $733 million, while in 1986 they enjoyed operating profits exceeding $1.3 billion.

What does the future hold for our industry? According to the Federal Aviation Administration's forecasts, which are traditionally conservative, we will carry 625 million passengers in 1996—another 50 percent rate of growth over the 418 million passengers in 1986. The FAA also forecasts that regional and commuter airline traffic will rise from 26 million in 1986 to 51 million in 1996. Our jet fleet, which presently numbers about 3,000 aircraft, will increase to 4,000 by the end of 1996, while the regional/commuter fleet will grow from 1600 aircraft at present, to 2200 aircraft in 1996. Lastly, the general aviation fleet will increase from 215,000 aircraft now to 260,000 aircraft in 1996.

Those figures are simultaneously cause for celebration and concern. Obviously, we are pleased at the prospect of serving significantly more customers over the next decade. Nevertheless, the capacity of the aviation infrastructure—our airports and airways—is demonstrably inadequate today and we therefore are very anxious about its ability to serve the needs of the travelling and shipping public in the future. The delays experienced by U.S. carriers, excluding those which were self-imposed, such as mechanical delays, averaged 2000 hours pay day year-round in 1986. They hit a peak of 2500 hours per day in July. That is equivalent to grounding 250 jet aircraft per day due to the limitations of the infrastructure. The delay situation seems to have improved somewhat in the last few months. However, this respite should not lull us into complacency. We have had a foretaste of what the limitations of the infrastructure portend for our industry and both you and we disliked the experience.

Airport and airways system capacity deficiencies significantly deter expansion of airline service. Those deficiencies frustrate both new entrants which wish to begin service and incumbents that wish to expand existing service. Ultimately, of course, it is the traveling and shipping public that suffers.

All parties concerned with the air traffic control system have recognized that the existing approach to developing and enhancing the system has become unsatisfactory. Each has recommended remedies that would, in his or her eyes, either alleviate or, in the best of worlds, eliminate problems with the system. What is common to each is the realization that those problems are serious and will worsen dramatically if they are not resolved.

As you know, Senators Ford, Kassebaum and Byrd, along with numerous others in the Senate, are cosponsoring S. 1600, which is a bill that would reconstitute the FAA as an independent federal agency. This timely legislation promises to revitalize the FAA and to provide it with the ability to deal more efficiently with the problems that it confronts.

In addition, Senators Stevens, Inouye and others have introduced S. 1159, which is a bill that would create a new government corporation to improve the funding and management of the ATC system. This bill also represents a thoughtful, responsible means for solving long-term aviation needs.

It is vital that the FAA be given greater independence and that the Administrator be given the authority to provide strong, consistent leadership with an assured tenure. Moreover, it is time that we join together to take the steps needed to remedy the budgetary situation that afflicts the FAA, simplify procurement practices that are ill-suited to meet its responsibilities, and reorganize its personnel policies and management practices to enable the agency to meet anticipated air travel demands.

From the Administration's point of view, there has been an effort in the fiscal year 1988 budget proposal, and in the announced intentions for 1989, to assure that a greater portion of the monies taken in from passengers and shippers are indeed spent for the purposes for which they are collected, and that some of the unconscionable surplus in the aviation trust fund is drawn down.

In addition, the FAA, with the full encouragement of the Department of Transportation, has been cooperating with the industry in devising new procedures which are designed to alleviate delays, such as decreasing the in-trail separation of aircraft and creating new airport arrival and departure routings. At the strong urging of DOT, the airlines met earlier this year to adjust their summer schedules to alleviate some of the delays caused by peaking. (Despite the criticisms of schedule peaking, it is a phenomenon which reflects passenger demand.) From the industry's perspective, these and other measures which are being considered are merely short-term reactions and not permanent responses to chronic underlying shortcomings.

Resolution of capacity controls at airports has proven intractable. Such restrictions neither reduce delays nor improve safety. Four airports are subject to the capacity-control limitations that the FAA's high density traffic airport rule imposes. They are Kennedy, LaGuardia, National, and O'Hare Airports. Allocation of airline operations at these airports is an extremely complex and controversial task, and since the inception of the high-density rule 20 years ago, each Administration has struggled with the issue. It is at these airports where the buying and selling of slots is permitted. Buy-sell is not in any sense a perfect answer but does represent the best alternative in an otherwise bad situation. Repealing buy-sell would not create any additional capacity at these airports. It would, however, seriously penalize the airlines which have invested enormous sums of money to improve facilities and equipment to serve the airports. Should the current system of allocation be changed, the airlines which have made such investments could lose the operations which have underwritten aircraft, terminals, and other facilities; and employees who have been hired or transferred from other locations would suffer.

People often regard regulation with an idealizing eye. That, of course, is unrealistic. Regulation inevitably imposes enormous costs upon consumers and producers of services. Free competition, in contrast, yields tangible benefits to the travelling and shipping public. Continued realization of those benefits should be encouraged, rather than jeopardized by thoughts of selective re-regulation.

TEXAS AIR CORPORATION,
Washington, DC., October 23, 1987.

Hon. ERNEST F. HOLLINGS,
U.S. Senate, Washington, DC.

DEAR SENATOR HOLLINGS: During hearings before the Senate Commerce, Science and Transportation Committee last week concerning the impact of airline deregulation on safety, numerous allegations were made by two Eastern Air Lines pilots. Mr. Steve Kolski, Eastern Staff Vice President and Counsel for Regulatory Compliance, testified on behalf of the company.

Several Eastern pilots were greatly concerned about the allegations of their colleagues who stated that the company forced pilots to fly unsafe aircraft. Enclosed are written statements by eight Eastern captains and a general technical foreman refuting many of the allegations made at your October 15 hearing. As you may know, earlier this week the Investigations and Oversight Subcommittee of the House Public Works and Transportation Committee held hearings focusing upon airline maintenance practices. The enclosed statements were submitted for that subcommittee's record.

I would urge you to review the enclosed statements in light of the allegations made by Captains McClure and Sexton. Upon doing so, I am confident you will agree that there exists significant disagreement within Eastern's pilot workforce as to whether they have been forced to fly unsafe planes.

Eastern respectfully requests that the enclosed statements be made a part of the record of the October 15 hearing.

Should you need additional information, please do not hesitate to contact me.

Sincerely,

FREDERICK D. MCCLURE,
Staff Vice President Government Affairs.

Enclosure.[1]

MIAMI UNIVERSITY,
Oxford, OH, October 17, 1987.

Hon. ERNEST F. HOLLINGS,
Chair, Commerce, Science and Transportation Committee, U.S. Senate, 508 Dirksen Office Building, Washington DC.

DEAR SENATOR HOLLINGS: The attached article might be of interest to you as your Committee conducts its current hearings on the state of the airline industry.

In fact, if you think it has merit, I would respectfully suggest that your staff include the article in the printed proceedings of the Committee's hearings.

With best wishes from the "other" Miami University, I am

Sincerely yours,

JAMES W. BROCK.

Enclosure.

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[1] See House hearing, Oct. 21, 1987.

THE NEW YORK TIMES, THURSDAY, AUGUST 6, 1987

Why Flying Is Unpleasant

[illegible]

By Walter Adams
and James W. Brock

Why are airline fares skyrocketing? Why is airline service going to the dogs? Why an't some pilots find the right runway or even the right airport? Why re some planes flying into the flight aths of others? The fashion is to lame deregulation and to search for solution in some form of re-regulaion.

This reflects both ignorance of hisory and an analytical failure to disinguish a disease from its sympoms. The problem lies not in deregulation but in the Reagan Administraion's failure to enforce antitrust laws nd build up safety regulation and versight — all of which are needed or fair and constructive competition.

The initial results of the 1978 deregulation of routes, rates and entry vere impressive: the number of cheduled carriers nearly tripled. Fares (in inflation-adjusted terms) ell 13 percent on average. The proortion of travelers flying on low-cost iscount fares rose from 48 percent to 0 percent by 1982.

Productivity in the industry imroved by an estimated 80 percent, ith cumulative cost savings of possily as much as $10 billion in the first several years. And air travel expanded at significantly higher annual rates, as larger numbers of people found it increasingly affordable.

Why, then, the current disenchantment? It is rooted in a profound misunderstanding of deregulation. Deregulation is not synonymous with rambunctious, laissez-faire anarchy. If regulations barring entry to the industry are dropped and price regulation is abandoned, then they must be replaced with another regulatory mechanism — competition. And this requires that Government enforce antitrust laws so that competition is not subverted by unrestrained mergers and oligopolistic collusion.

Yet, the Reagan Administration has abandoned this responsibility. It has tolerated the most widespread merger and acquisition movement in the industry's history. In all, the Administration has countenanced 38 airline mergers and acquisitions, which have created a highly concentrated, noncompetitive industry. Once the USAir-Piedmont consolidation is completed, just eight carriers will collectively control 94 percent of the nation's airline business.

In regional markets, the impact of the absence of competition is clear. Before 1978, St. Louis was served by five airlines. While nine more carriers entered the St. Louis market after decontrol, their numbers quickly dwindled. Today, T.W.A. controls 82 percent of the city's air passenger traffic. The problem is replicated across the country. At 15 of the nation's largest airports (including Denver, Detroit, Houston, Minneapolis and Pittsburgh), either half of the business is now controlled by a single carrier or two carriers share more than 70 percent of the traffic.

More competition is needed.

The problems posed by the lack of competition have been exacerbated by a proliferation of anticompetitive practices among the airlines.

Computerized reservation systems — which are widely used by travel agents to book flights and are crucial to the ability of all carriers to compete — are dominated by two of the nation's biggest air carriers.

United's Apollo system and American Airlines' Sabre system together account for 70 percent of passenger revenues booked by travel agents nationwide. Control of these computerized systems has enabled the airlines to stifle competition in a number of ways: biasing screen displays by listing competitors' flights last, using information gained through the systems to unfair advantage and charging exorbitant rates for access to these key systems by other carriers.

Monopolization of airport terminal gates has further eroded competition. The airline oligopoly blocks potential competitors by tying up gates through exclusive long-term leases and by obstructing expansion plans by local airport authorities. In some cities, gates go unused because established carriers either refuse to lease them or demand astronomical rents.

"Frequent flyer" programs also restrain competition by bonding flyers to the largest carriers and undermining passengers' willingness to switch to smaller or new competitors.

The combination of concentration and anticompetitive practices means that fares are rising, consumer choice is diminishing and service is deteriorating. Instead of meeting schedules, airline managements are meeting merger brokers and devising guerrilla tactics to cripple competition.

Ideological zeal has contributed to the safety problems. Deregulation was expressly intended to be confined to fares, service, offerings and routes — but *not* to safety. In fact, safety regulations should receive increased attention in a deregulated environment. But here, too, the Administration seems a hostage to an extremist notion of laissez faire.

Aircraft departures have risen 14 percent since 1978, while the number of passengers flying has escalated by 52 percent. Yet, according to informed counts, the number of fully qualified air traffic controllers has declined by more than 4,000 since 1981. Moreover, the workforce that maintains the nation's air traffic control equipment has fallen by about half since 1978, and the average number of aircraft safety inspectors has dropped from 4.52 per carrier in 1976 to 1.33 in 1985.

The policy conclusions should be obvious. First, economic deregulation does not mean abandonment of safety regulations. Second, deregulation without competition does not serve the public interest. The competitive market is neither a self-perpetuating nor an immutable artifact of nature. If it is to perform its role as economic regulator, it must be protected from subversion, and that is the inescapable responsibility of Government. It calls for strict antitrust enforcement, especially against oligopolistic mergers and market concentration.

Failure to grasp these truisms jeopardizes the deregulation policy that this Administration professes to cherish.

Valter Adams, professor of economs at Michigan State University, and ames W. Brock, associate professor f economics at Miami University of hio, are co-authors of a book on the ffects of industrial concentration.

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December 10, 1987

Honorable Ernest F. Hollings
Chairman
Committee on Commerce, Science and Transportation
United States Senate
Senate Office Building
Washington, D.C. 20510

Dear Senator Hollings:

In recent testimony before your committee, Alfred Kahn made certain claims about the benefits of airline deregulation. Based on these claimed benefits, Mr. Kahn declared that deregulation "has been a success". By implication, it would be inappropriate to consider any modifications in this environment.

In particular, Mr. Kahn cited "low fares and improved productivity" as benefits of deregulation. He pointed out that between 1976 and 1986, average airline fares declined by 28-1/2 percent in real terms (i.e., adjusted for inflation.) According to the report in the Aviation Daily, he then went on to say that fares would have remained constant under regulation.

The error in that statement is graphically revealed in the attached Chart 1. This shows the long term trend of airline fares --- in real, inflation-adjusted terms --- going back several decades before deregulation. The trend since deregulation is no more than an extension of the trend that was clearly evident long before. The popular impression that deregulation has brought dramatic improvement in airline prices is an impression created by the admittedly great bargains on some specific routes. But because those super-bargains are often below cost, carriers have been forced to escalate fares very steeply on other routes in order to survive. On the non-bargain routes, fares are often two or three times above their 1978 level. (And contrary to Mr. Kahn's statement, these steeply escalated fares are by no means limited to thin-traffic routes that are costly to serve.)

When the overall average of all travel, on all routes, is considered, we get the picture shown on Chart 1 --- a deregulated trend of airline fares that is merely in line with the trend previously in effect during regulation.

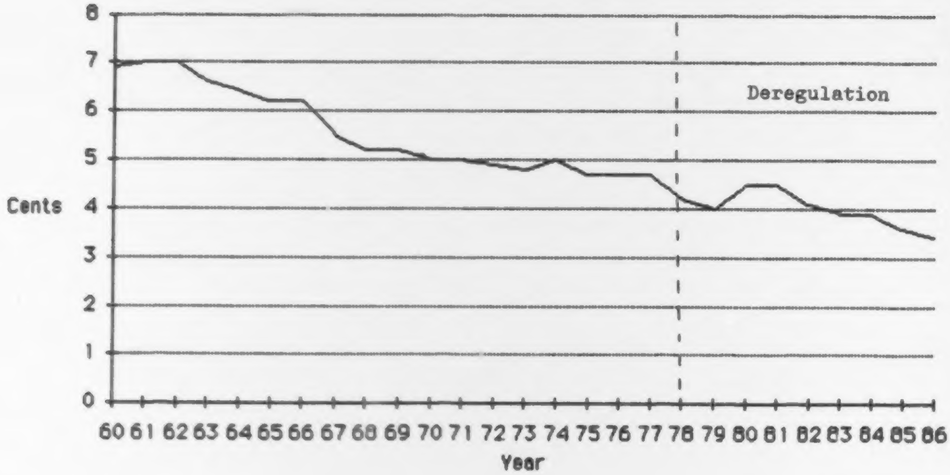
Mr. Kahn is equally in error in referring to the "enormous expansion of air travel that it [deregulation] has encouraged." Chart 2 presents the before-and-after trend of airline passenger-mile traffic. Here again, the trend since deregulation is merely an extension of the long term trend that was well established during the years of regulation.

As for increased airline productivity, this again is more impression than fact. To be sure, the pressures of deregulation have forced greater efficiencies in some aspects of airline operations. But deregulation has simultaneously forced the airlines into less efficiency in other factors (e.g., in the pressure to use smaller planes, with their higher seat-mile costs). One measure of productivity is revenue ton-miles per employee. In the 8 years between 1978 and 1986 that did indeed improve, by 23%. But it had improved even more (i.e. by 39%) in the same length of time before deregulation.

It is important that the record be viewed accurately, based on facts, and not mere impressions. It is all too evident that various problems have developed in the air transport system, as indicated by the several Congressional hearings on the subject. * It would be unfortunate if mistaken impressions about the benefits of deregulation created a feeling that this environment is "untouchable." It is quite possible that the long term air transport needs of the general public would best be satisfied by some steps that would involve at least a partial restoration of the regulatory concepts of a balanced network system. At least that possibility should be objectively considered, without being automatically foreclosed by an unwarranted halo placed around deregulation.

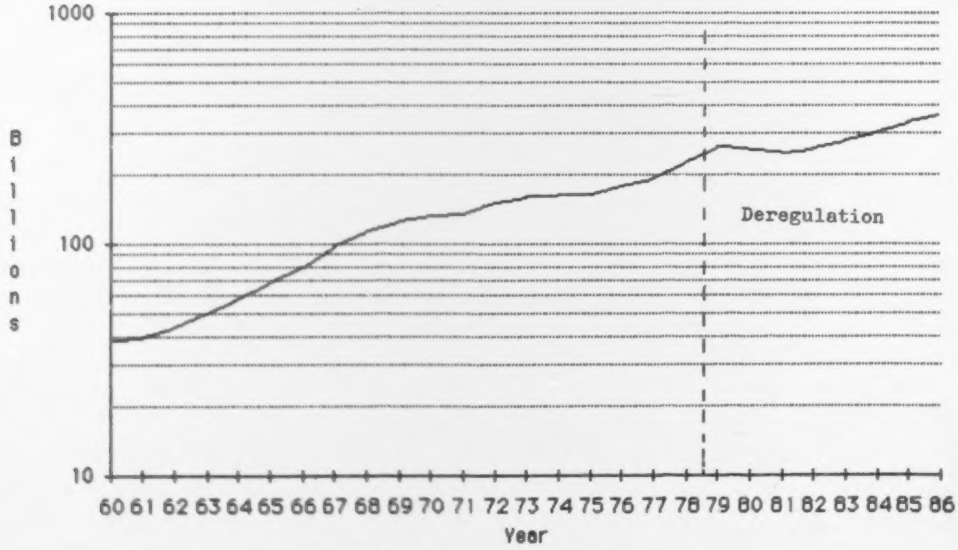
Sincerely,

Chart 1



Fare per Mile, in Constant 1967 Dollars

Chart 2



Passenger Mile Trend

NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION
MEBA/AFL-CIO
Suite 800 • 444 North Capitol Street, Washington, D.C. 20001 • 202/347-8585
NATCA

October 21, 1987

Senator Ernest F. Hollings, Chairman
Commerce, Science & Transportation Committee
Dirksen Senate Office Building
Room 508
Washington, D. C. 20510

Dear Mr. Chairman:

Thank you very much for the opportunity to testify before your Committee last week on the Effects Of Airline Deregulation On Aviation Safety.

I would like to discuss a few items that came up during Administrator McArtor's testimony.

When discussing rehire, Mr. McArtor opposed the concept, citing the following reasons: (1) that there was a correlation between a Controller's age and ability; and (2) that ATC is built on teamwork and rehire would negatively effect that teamwork.

Yet, right after dismissing rehire for the above stated reasons, Mr. McArtor commented that he would like to have the ability to allow retired Controllers to come back in and perform ATC duties on a part-time basis. It would seem that this concept would create the same problems that the Administrator alleges rehire would create. If age is a consideration, and I believe it should be, then retired Controllers would also fail to satisfy the FAA's test. Mr. McArtor, rightfully, suggests that teamwork is an important factor in the philosophy of ATC, but fails to realize that the inclusion of retired Controllers back into the System would negatively affect teamwork and would create a serious morale problem. This is true for the following reasons: (1) retired Controllers, working part-time are not fully committed to the System, (2) Controller early retirement legislation was enacted because ATC is a very difficult and demanding task and the incidence of burnout is well documented; and (3) retired, part-time Controllers will only work prime hours (day shifts during the week). This leaves the evening, graveyard shift and week-ends for the full-time Air Traffic Controllers. You can imagine the effect that will and has had on the workforce.

Senator Hollings, my real concern is that the FAA continues to look at band-aid remedies. Somehow it has to be convinced that it must embrace the appropriate hiring program to bring Controller levels up to the point where we can manage safely and efficiently the traffic generated into the System.

Thank you for your concern on this very important matter. We at NATCA remain committed to working within the System to develop remedies.

Sincerely,

John F. Thornton, NATCA
National Coordinator

87 NOV -7 [illegible]

Honorable Ernest F. Hollings
125 Russel Senate Office Bldg.
Washington, D.C. 20510

October 31,1987

Dear Senator Hollings,

I am an air traffic controller at the Washington ARTCC with twenty two years of experience and a member of the Executive Board of the Washington ARTCC Local of NATCA.

Mr. John Thornton and I of The National Air Traffic Controllers Association (NATCA) attended the meeting of the Senate Commerce, Science and Transportation Committee on October 15,1987. This committee met to discuss the effects of airline deregulation on aviation safety. We were unable to testify because of time constraints which we fully understand. Therfore, I would like to take this time to answer some of those questions, for the record.

You asked Mr. McArtor the time it would take for fired controllers to become proficient again. He suggested nothing. You then querried, "What about three weeks ?".

From my own experience of training rehired controllers, it takes six to eight months.

You and Sen. Ford then asked Mr. McArtor how many controllers were needed. No number was given.

According to our facility manager in a February 3,1987 meeting with his managers, the following was stated: In 1981, prior to the strike, our full performance controller (FPL) workforce at Washington ARTCC was handling approximately 5,400 operations per person per year. As of February 3,1987 they were handling approx. 9,800 operations per person per year - almost double. It was further stated that the FAA's goal was to reach 10,000 of these operations by the year 2000. This projection includes new equipment, most of which is not yet developed. Well, here we are in 1987 at 9,800 operations, which is pretty close to 10,000 and we are still using alot of old, out-dated equipment (more on this later) and there is still 12 years to go.

We had 16,000 FPL controllers prior to August 1981 and our staffing appeared to be adequate then. Today we are working at least 30% more traffic, systemwide. It would seem then, that we need 30% more controllers then we had in 1981, that's 4800 more controllers. That would bring our total FPL workforce to 20,800 (16,000 + 4,800). According to a September 22,1987 Press release by the FAA, we have 9,656 FPLs. Therefore we need 11,444 additional FPLs. It's commonly understood that the failure rate in the training program (from original hire to FPL) is around 50%, therefore it appears to me that we need to hire some 22,000 more controllers, today. That doesn't even consider the transfers, promotions and retirements.

The administrator spoke of new equipment, for which we all applaud. However, with all due respect, the one most important piece of equipment that a controller relies on is in the worst need of replacement; namely the radio equipment. The radios we are using today are old (some of it World War II vintage equipment) and wearing out rapidly. I think there is plenty of evidence, in the form of logs and personal horror stories that will attest to this. Fancy computers and displays are nice but you can't seperate airplanes if you can't talk to them. The next item down the list is our ailing PVD's ("planned view displays" or radar scopes). The keyboards and button packs, not to mention the technical innards, are failing often and the new "Sector Suites" are many years away. In this era of high traffic volume and complex procedures it is very distressing, even dangerous at times, when you push a button or key the mike and nothing happens. Along these same lines, we also need more sites for radars and radios to give us the coverage that is needed. There are many high volume traffic areas that are handicapped because of poor or nonexistant radar or radio coverage. It's a bit ironic, I think, with these Congressional meetings shown on television, that the FAA seemingly isn't asking for anything with needs that are so glaring.

In concert with this needed equipment there is also a need for more technicians. It is common knowledge that the technician ranks have dwindled. In our facility, it seems, many times there is a long delay when something needs attention right away.

The time for bandaids is past. Mr. Burrnett of the NTSB stated that the system is running at, or near the red line. Some major surgery is needed, now.

Thank you for your time. If I can be of any further help please don't hessitate to contact me.

Yours Truly,

Larry Barbour
Member, Washington ARTCC
NATCA Executive Board

interoffice correspondence EASTERN

TO: Phil Bakes ADDRESS: MIALX
Joe Leonard MIAVP

FROM: Steve Kolski ADDRESS: MIAVC
EXTENSION:

SUBJECT: Pilot Testimony Before Senate Committee on Commerce, Science & Transportation DATE: Nov. 10, 1987

On October 15, 1987 two Eastern pilots, Captain Don McClure and First Officer James Sexton, presented testimony before the Senate Committee on Commerce, Science and Transportation that was critical of Eastern's management, and critical of Eastern's maintenance and operations practices. They cited several events involving specific flights and aircraft to support their claims.

Since October 15, 1987 I have received information from Maintenance and Flight Operations personnel which shows that both McClure and Sexton chose to omit important relevant facts from their testimony which, when known, cast a far different light on the events they related. In short, their testimony was misleading.

First Officer Sexton testified about two events. The first concerned flight control checks on A-300 aircraft. It appears that Mr. Sexton developed an unapproved, unauthorized and unorthodox way of performing flight control checks on A-300 aircraft. This unorthodox method was contrary to the airplane flight manual, the way he was trained and the way these checks have been performed by hundreds of other crewmembers in the ten years Eastern has operated A-300s. Basically, instead of checking one flight control at a time, Mr. Sexton began to check all three controls simultaneously. The result was a faulty indication in the aircraft's hydraulic indicating system.

Mr. Sexton attempted to characterize appropriate management follow up as a "very shrewd weapon of intimidation". Here is what happened.

When flight 11 from LGA arrived in MIA on September 10, the A-300 fleet manager received a telephone call from a maintenance supervisor in MIA that the crew had performed a flight control check during taxi in (these checks are usually accomplished on taxi out), and recorded a malfunction of the aircraft's hydraulic indicating system in the logbook. Since this was the same crew that had been previously involved in a similar reported malfunction, the fleet manager spoke with the captain by telephone and then agreed to go to the terminal to observe the control checks and the alleged malfunction. He was accompanied by a second officer supervisor, a technical manager and an Airbus Company technical director.

Although it is clear from his testimony that Mr. Sexton resented having his judgment and performance questioned by supervisory personnel, it is not at all unusual for company and manufacturer representatives to take the actions they did in this case. In fact, the amount of attention paid to the matter demonstrates how careful and detailed we are when we receive reports of malfunctions which, if correct, suggest that a safety problem may exist. Nevertheless, in all the years Eastern has flown this aircraft, only this crew was performing flight control checks in this manner.

As it turned out, however, the matter was not serious at all. The crew was improperly checking the system on the ground by moving all the flight controls simultaneously, a check which will result in unreliable low hydraulic pressure readings. In the ten years that Eastern has operated this airplane, no similar A-300 flight control problems have been brought to management's attention, ostensibly because the rest of Eastern's flight crews perform the checks in the proper manner.

Mr. Sexton was also critical of Eastern for having him operate flight 453 from ATL to MIA on October 9, 1987 with a low speed aileron inoperative. Operating an A-300 aircraft with one or more low speed ailerons inoperative in no way compromises safety, provided the aircraft is operated within the limits prescribed in the appropriate flight manuals. Under Eastern's FAA approved Minimum Equipment List (which has the approval of the manufacturer and the FAA), this item may be inoperative provided the crew adheres to an operating restriction of 250 knots of indicated airspeed. Although flying the aircraft with the low speed aileron inoperative is inefficient (more fuel is burned), there is absolutely no derogation in safety as a result. Contrary to Mr. Sexton's implication, there was nothing unusual about the computer being unable to print out a flight plan for this flight. Eastern's computer flight planning system does not have flight plans stored for all abnormal operating conditions; however, dispatch will manually construct a flight plan which will fit the particular circumstances in the same manner they construct a flight plan when the computer is not functioning properly.

Captain McClure also testified about two events. The first occurred when he was "removed from a flight" on August 10, 1987 for refusing to fly an aircraft with one of its navigation systems inoperative. He stated that he was "sent home", leaving 149 passengers and six crewmembers on the aircraft. Captain McClure's version of the incident is very incomplete and misleading.

First, the #2 or first officer's navigation system was functioning -- only the DME (Distance Measuring Equipment) portion was weak. Both the DME and VOR positions of Captain McClure's #1 system were operating normally. Had the flight been operated, it would have complied in all respects with the Federal Aviation Regulations and, more important, would have been perfectly safe. Although Captain McClure refused to fly the aircraft, his decision was a frivolous one. In fact, flight operations management is sure that in his 23-year Eastern career, Captain McClure has flown numerous airplanes with similar minor deferred maintenance items. The only difference is that now there is an ALPA slowdown in effect and Captain McClure is one of its leaders.

Captain McClure stated that he was sent home, implying that this was due to his refusal to fly the aircraft with this minor maintenance item deferred. In fact, Captain McClure was sent home because he refused to discuss the matter with Eastern's Chief Pilot without tape recording the conversation. Even though he was sent home, Captain McClure did not lose any pay.

It is significant to note that Captain McClure did not directly testify that it would have been unsafe to fly this aircraft with a portion of one of the aircraft's navigation systems inoperative. Nevertheless, by implying that is was unsafe, he has questioned the professional judgment of the captains who flew the aircraft prior to his refusal while this minor repair was deferred in accordance with our FAA approved maintenance program.

Captain McClure also testified that the altitude alerting system on an aircraft (he was referring to aircraft 548) was inoperative from August 22 to September 6, 1987 and that the reason it was not fixed was due to the unavailability of replacement parts. It is significant to note that the components of the altitude alerting system on aircraft 548 are different than the majority of B-727 aircraft in our fleet. Aircraft 548 is one of nine B-727s that Eastern purchased from Pacific Southwest Airlines several years ago. The altitude alerting monitors and altimeters (the two primary components in the system) on these aircraft are not interchangeable with the other 110-plus B-727 aircraft in our fleet and, therefore, we must maintain a separate supply of spares. During the end of August and beginning of September, serviceable replacement altitude alerting monitors and altimeters for these aircraft were in short supply and this aircraft operated with the altitude alerting systems on MEL although several attempts to repair it were made, including the replacement of the monitor (we have authorized four spares but have a total of six for nine aircraft) and the captain's altimeter (we have four spares for nine aircraft). It appears that since the malfunction was repaired with the replacement of the captain's altimeter, the earlier replacement was faulty from stock.

Captain McClure testified that when Captain Knudson refused to fly aircraft 548 on September 10, he was grounded by his chief pilot. While this is true, Captain Knudson was returned to flight status without loss of any pay. Like Captain McClure, Captain Knudson did not directly claim it was unsafe to fly a B-727 aircraft with an altitude alerter inoperative.

It is widely recognized that a B-727 may be flown safely without this system functioning normally. The altitude alerting system was never intended to be the primary system for pilots to rely on to maintain their assigned altitude. Each pilot has an altimeter for this purpose. Consequently, Eastern's FAA approved MEL, like that of every other B-727 operator, allows this system to be inoperative. If ALPA believes this is unsafe (which I doubt it does) then they should petition the FAA for a change to the Master Minimum Equipment List.

Steve Kolski

Steve Kolski

EASTERN AIR LINES INCORPORATED / INTERNATIONAL AIRPORT / MIAMI, FLORIDA 33148 / 305-873-2625

[illegible]

PRESIDENT AND
CHIEF EXECUTIVE OFFICER

November 13, 1987

The Honorable Ernest F. Hollings
Chairman, Senate Committee on Commerce
 Science and Transportation
125 Senate Russell Office Building
Washington, DC 20510-4001

Dear Senator Hollings:

This is in reply to your letter of October 21, 1987 in which you enclosed copies of testimony given by Eastern pilots Don McClure and James Sexton to the Commerce Committee on October 15, 1987.

You characterized that testimony as "devastating... to the effect that airlines are now sacrificing safety for profit." In all due respect, I do not believe that the evidence presented at that hearing supports this conclusion. Mr. McArtor, the Administrator of the FAA, testified that the margin of safety had been maintained or improved since airline deregulation was enacted in 1978. Jim Burnett, the Chairman of the NTSB, testified that since deregulation there had been a dramatic and undeniable improvement in aviation safety. Mr. Burnett also stated that he had seen very little evidence that the airlines were cutting corners on maintenance.

As you know, Eastern was the only major carrier to testify at those hearings. Eastern presented extensive testimony about the recent actions we have taken to enhance the safety of our operations. There is no doubt in my mind that Eastern is a safer airline today than it was one year ago when Texas Air acquired it and, in effect, inherited the $9.5 million civil penalty assessment. More manpower, more money and more management attention are being devoted to safety today than at any time in the company's history. This is the direction we have taken as the new "bottom line" management at Eastern.

In 1987, Eastern will spend over half a billion dollars for maintenance and engineering, a 42% increase from 1985. Maintenance will account for 12.1% of Eastern's total operating expenses in 1987, compared to only 8.1% in 1985. American Airlines boasts that it spends $1.5 million per plane on maintenance. In 1987, we will spend over $1.8 million per plane.

Eastern's commitment to improving maintenance is also reflected in increased manpower and training. Since 1985, Eastern has more than doubled the number of manhours devoted to training its mechanics. Eastern expects to devote almost 320,000 hours to training in 1987 compared to approximately 140,000 in 1985. This year the average Eastern mechanic will spend 30 hours more in training than in 1985.

One thing has changed for the worse, and, unfortunately, it has received the most attention. The company's recent efforts to restructure its labor costs--a necessity for the economic well-being of this company--has resulted in some of our unions, particularly ALPA, resorting to safety scare tactics as a collective bargaining weapon. A very small but vocal minority of ALPA members has tried to create the impression that Eastern's maintenance has suddenly deteriorated. As the facts at Eastern demonstrate, however, the opposite is true.

By the early part of 1987, several months after we assumed the day-to-day management of the airline, Eastern's maintenance performance indicators were improving significantly. The MEL (minimum equipment list items deferred with FAA approval) count was coming down steadily, and delays and cancellations attributable to mechanical reasons were on the decline. Then, shortly after we announced our belief that for Eastern to survive and prosper, the airline's labor costs had to be restructured over time, the slowdown began. Pilot write-ups of maintenance discrepancies dramatically increased. Many were very subjective and impossible for a mechanic to verify, such as a windshield "obscuring vision in flight." The delay and cancellation rate attributable to mechanical reasons also increased, and MELs shot upwards for several months. Eastern's mechanics have spent countless additional hours and millions of dollars over and above our already dramatically increased maintenance budget just keeping pace with the pilots' actions. Our efforts have paid off. Eastern's open MEL count is lower today than at any time in recent years and we have accomplished this while enduring a most disruptive job action.

ALPA's tactics are not new. As far back as 1968 ALPA openly recommended that a "safety slowdown" campaign should be used as "essentially an economic weapon against the company." The tactic has been used several times since then. Earlier this year, ALPA literature announced that "any and all means," including a "Max Safety campaign," would be used against Eastern. The slowdown has had innumerable adverse effects on Eastern, not the least of which is a great deal of publicity founded upon misinformation, half-truths and outright lies. As you might imagine, it is difficult to counter this type of public relations campaign.

Senator, contrary to what Captain McClure and Mr. Sexton have told you, there is no policy of intimidation and reprisal at Eastern. In spite of the obvious disruptive activity engaged in by certain crewmembers since the ALPA slowdown began, not one Eastern pilot has lost any pay as a result of his actions. You should know, however, that there has been considerable intimidation against other Eastern pilots who have seen the slowdown for what it is and who have had the courage to stand up publicly and say so. They have received obscene phone calls, their names are scrawled on bathroom walls and their property has been defaced. I would suggest that actions such as these come much closer to intimidation than anything Eastern has done to any of its employees.

ALPA also has a history of using intimidation as a negotiating weapon. When Continental Airlines tried unsuccessfully to obtain labor concessions to avoid bankruptcy in 1984, a United States bankruptcy court found that ALPA's "primary aim [was] to shut down Continental." The court observed that while a shut-down might hurt some pilots in the short term, ALPA had "strong motives" for setting an "example to other carriers whose pilots are represented by this large and extremely powerful union." ALPA's tactics included bombings, arson, random vandalism, and other violent acts against Continental and its employees, many of which were brought before a Federal grand jury and resulted in indictments, convictions and long jail terms for ALPA activists. One of the leaders of this effort against Continental was Captain Don McClure, who stimulated a "60 Minutes" broadcast about alleged unsafe practices at Continental and who lobbied the House committee on Government Operations to hold hearings attacking Continental. In spite of Captain McClure's efforts, no objective observer believed that Continental was unsafe then any more than they should believe that Eastern is unsafe today. Today, Captain McClure's vendetta against the Texas Air Corporation continues unabated. According to Eastern Captain Robert White, Captain McClure told him that "he has no other ambition in life than to see Eastern Air Lines' relationship with Frank Lorenzo terminated or to see Eastern Air Lines destroyed."

One of the most frustrating aspects of the slowdown is the postcard campaign. ALPA distributed thousands of pre-addressed postcards to Eastern pilots requesting them to report alleged violations to Congress, the FAA, DOT and the NTSB. No postcards were distributed to the pilots of any other airline. While only a small minority of pilots have chosen to participate, the effects of the campaign have been severe. Most of the cards intentionally do not provide sufficient information for investigation, but Eastern and the FAA have attempted to investigate all postcards that provide some facts. Eastern and the FAA have poured a great amount of money and effort into this task because if problems do exist, we want to identify them and take the necessary corrective action. To date, however, the postcard campaign has only succeeded in diverting company and Government safety resources away from more important activities. Even the FAA will tell you that investigating the vast majority of these postcards has been a waste of time.

ALPA has found that it can conduct a slowdown with little fear of reprisal from the FAA. The FAA apparently has no jurisdiction over ALPA's conduct in these matters and it is nearly impossible to trace false allegations to particular individuals. When ALPA's tactics have clearly been unlawful, the FAA's response has been inadequate. For example, when ALPA counselled its members to place inflammatory stickers in Eastern cockpits with "industrial strength" adhesive, the FAA asked Eastern to remove the stickers because they posed a safety hazard. The FAA has taken no action against those who were responsible. Eastern believes that anyone who knowingly files a false safety complaint with the FAA or engages in activities designed to purposely disrupt a carrier's operations should be subject to severe criminal and civil penalties.

For your information, I am enclosing a copy of a memo which I requested my staff to prepare on the four specific incidents raised by Captain Mcclure and Mr. Sexton in their testimony. Although Eastern may not have performed perfectly in each instance, we believe the evidence demonstrates that Eastern's actions were far more reasonable than the ALPA witnesses would have you believe.

Naturally, I stand ready to meet with you and the Committee to discuss these and any other issues of concern. All of us share a heavy responsibility to ensure the safety of the travelling public and we at Eastern take that responsibility extremely seriously. That is why we have been so proud of the objective record of our accomplishment in the safety area during our relatively short time at Eastern and, at the same time, so frustrated by ALPA's slowdown, ALPA's harassment of pilots who refuse to participate in the slowdown, and the unfair and unsupported allegations made in the press and to members of Congress. Labor disputes should be resolved at the bargaining table, not by maliciously generating animosity toward the company over supposed "safety" concerns.

I would appreciate it if a copy of this letter could be included in the Committee's record of these proceedings.

Sincerely,

Phil Bakes

Enclosure